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# Original Articles.

SOME OF JOHNSTOWN'S LESSONS.

By BENJAMIN LEE, M.D., Ph.D., PHILADELPHIA.

Secretary of the State Board of Health of Pennsylvania.

THE State Board of Health of Pennsylvania has firm faith in the value of sanitary conventions, believing that they subserve these two useful purposes:—First, the improvement of the sanitary conditions of the city in which the meeting happens to take place, by leading the citizens to seriously consider the particular evils which threaten the health of the community; and, second, the more general, and, perhaps, more important object, of educating public opinion as to the necessity for sanitary reforms, and thus acting by reflection on the legislatures of the several States, and leading them to pass the necessary measures to initiate and carry out such reforms.

On the 31st day of May last, the Board was holding such a convention in the Iron City. If the Board had stationed a hand-organ, with a monkey, in front of the hall in which its sessions were held, and posted a placard, stating that the Brown-Séquard elixir would be administered, free of cost, the meetings would have been thronged; but, as it had no higher aim than to teach the good citizens of Pittsburgh how many valuable lives might be saved every year, and how the general longevity might be increased by the adoption of certain simple, rational rules of living, and of civic administration, the many

admirable papers which were presented were read to meagre, though intelligent and deeply-interested, audiences. It must be allowed that there were special reasons which made the attendance smaller than it might otherwise have been. Much of the time it rained copiously. The Allegheny River was rising rapidly, and becoming turbulent; and, on the second day, the immense mass of wreckage which it swept along excited universal interest, and drew crowds to the shores and bridges to watch anxiously for indications of human habitations or loss of life. The suspense was not long. Rumors of wash-outs on the Pennsylvania Railroad were soon followed by the more definite report that the mountain city of Johnstown had been partially destroyed by flood; and the following morning (which was Sunday) left no room for doubt that a disaster, without parallel in the annals of the country, had been caused by the bursting of a dam, and that no figures under thousands would be adequate to count its victims. The State Board of Health at once set itself to work to avert the dangers to life and health which in the past have invariably followed wholesale drownings of men and domestic animals, and destruction of homes. these efforts it was supported to the fullest extent by the Chief Executive of the State, who did not hesitate to assume the risk of the immense burden of a loan of \$400,000, to meet the expenses of the gigantic work, when it was found that the State Treasury could not be drawn upon for the purpose. With what success the Board labored, the health conditions of Johnstown during the following summer must be the witness.

When the Board was first established, four years ago, it issued an address to the people of the State. defining what it felt to be its scope, it duties, and its responsibilities, in the course of which the following language occurred: "In an immense territory like our own, larger than that of most of the nations of Europe, with its great diversity of surface, its wide mountain ranges and its vast forests wonderful opportunities exist for sanitary engineering on a large scale-determining in what directions water-sheds shall be encouraged, and in what diverted; to what extent private corporations are to be allowed to jeopardize the health of large sections of the country by obstructing natural water-courses for the purposes of manufacture or navigation; deciding how far certain forests act as natural barricades against devastating winds, and should, therefore, be left untouched by the axe in order to maintain a permanent rainfall, and thus avert droughts, cyclones, and floods, and how far others interfere with the circulation of healthful breezes, and may, therefore, be with benefit removed." This was but one of the many neglected functions of State Government which the Board felt that it might properly be called upon to assume, in the absence of any other authority charged with its performance. If there was ever a State in which self government was pushed to the verge of absurdity, in which affairs are allowed to manage themselves, in a happy-go-lucky sort of way-every man for himself, and the devil take the hind-mostthat State is the great, the venerable Commonwealth of Pennsylvania. Hence, three great evils have been allowed to go entirely unchecked in her mountain regions:

1. The reckless destruction of forests, leaving the mountain sides bare and denuded. From this, two results: the substitution of cataclysmal down-pours from the clouds for the gentler rains which characterize well wooded countries, and the almost instantaneous passage of this water into the large water courses, in place of its absorption by the foliage and roots of the trees of large forests.

2. The construction and maintenance of large dams, without governmental oversight; and,

3. The encroachment of manufacturing and other companies on the beds of streams, thus rendering them too narrow to allow storm-waters to escape, and making devastating floods a thing of course. In the light of Johnstown's disaster—to the production of which all three of these conditions contributed-this utterance of the Board seems almost prophetic. But it was as it was in the days of Noah. The warning fell on heedless ears. "They did eat, they drank, they married, and were given in marriage, until the day that the flood came and destroyed them." To most of those who took the trouble to read the address, these suggestions un doubtedly seemed wild and impracticable, and it will probably be many a long year before these three most evident of Johnstown's lessons will be sufficiently well learned to lead to such legislation as shall render a repetition of Johnstown's calamity impossible. But, given a similar calamity, what are some of the lessons which she can teach us out of the bitterness of her experience?

Next to that of food and clothing, provision for which it would be impossible to make in advance. the want most urgent, and that which interfered most seriously with the rendering of relief during the first two weeks following the disaster, was that of bridges. Communication with the different portions of the flooded district was well nigh impossible. For several days, two small, leaky skiffs were the only means of transporting food, laborers, coffins and corpses to and from the Pennsylvania Railroad Station and the ruined city. The first really substantial relief to this painful embarrassment was that afforded by the United States Engineer Corps, which came bringing boats for the construction of pontoon bridges. The thought naturally suggests itself that a pontoon train should form a portion of the militia equipment of each State, and that an Engineer Corps should be established which should be drilled in the construction of such bridges, with the same regularity that characterizes the instruction of other arms of the militia service in the life destroying branches of the art of war.

The second great need was that of shelter. Like Robinson Crusoe on the desert island, having obtained the wherewithal to cover their backs, and stay the cravings of hunger, these unfortunates had tolook about them for habitations. The comparatively few houses which were left in a habitable condition were crowded to repletion. Many of them contained the remnants of four or five families in addition to their ordinary occupants. Under these conditions it required the utmost vigilance on the part of the Board to prevent the occurrence of the diseases which are known to accompany over-crowding. This want was measurably met by the Flood Relief Commission, in the purchase of ready-made houses from the West, designed for persons forming temporary camps. It was difficult, however, to obtain a sufficient supply of these on short notice, and they had to be brought a long distance. It would be a wise move on the part of the State Legislatures to procure a considerable number of such portable dwellings, and keep them stored at different points, to be ready for immediate use in emergencies. In the event of the occurrence of epidemics, they would serve an admirable purpose as hospitals. The Engineer Corps might also be instructed in the most expeditious manner of putting them together. Being comparatively inexpensive, they could be burned after being used by patients with contagious diseases.

The third difficulty which confronted the State Board of Health was the absence of local sanitary authority, or organization. There was no nucleus on which to form a sanitary corps. The whole machinery had to be created de novo. But for the prompt arrival and intelligent assistance of the Sanitary Police, of the cities of Pittsburgh and Allegheny, the task would have been much more perplexing. The services rendered by these officers, in house-to house inspection and the distribution of disinfectants, and in instructing the new recruits of the corps in these duties, cannot be too highly estimated, and contributed largely to the prevention of sickness. Pennsylvania is one of the few States which still lag far in the rear in the matter of sanitary organization. Her Legislature

makes no provision for the establishment of Boards of Health in any places having less than ten thousand inhabitants, or not possessing a city charter. In several instances, where the Board sent disinfectants to flooded villages, in different parts of the State, the inhabitants refused to remove them from the cars, and there was no local authority of any kind to make the proper use of them. The dream of the State Board of Health, as expressed in the address above referred to, that "there shall not be a hamlet in the entire domain of the State, without its regularly constituted health officer," is apparently as far from realization as ever.

Such organization would also obviate, to a great extent, another obstacle with which the Board had to contend, viz: the difficulty of obtaining recognition, and compelling obedience, on the part of local subordinate officers. Johnstown was like a place in a state of siege. Ex tempore policemen, armed with ball clubs, muskets, shot-guns and pistols, and decorated with a rude tin star, seemed to spring out of the ground at every turn, like the dragon's teeth sown by Cadmus, and made it very uncomfortable for one not well supplied with passes from the half dozen officials who ruled in the different sections of the devastated region. The delay thus caused was often a serious interference with the conduct of busi-To avoid this I adopted the following devices: In the Pennsylvania Railroad Station, which was one of the first established morgues, and the floor of which was covered with nude bodies of both sexes and all ages, I fortunately found a can of black paint and a brush, designed for marking freight. Tearing a strip from a roll of white muslin, in which the dead were being hurriedly enwrapped, I painted on it the words, "Sanitary Corps," and pinned it to the front of my hat. This worked like a charm, proving password, countersign, and open sesame to the most obdurate guard. The suggestion that occurs to me in this connection is this: That in each State there should be adopted a uniform for sanitary officers, or, at least, a sanitary badge which would at once be recognized by all who saw it, in all places and under all circumstances, as conveying authority, and entitling the wearer to proceed to the performance of his important duties without hindrance. The value of such a provision was made strikingly apparent upon the arrival of the uniformed Sanitary Police from Pittsburgh. The people at once manifested confidence in them, and listened respectfully to their suggestions and orders, while they had been inclined to be suspicious of the motives of the un uniformed men, and to resent their interference - and the special constables rarely stopped them.

No one who was present in Johnstown before and after the time at which the State Militia were commissioned to assume control of operations for the abatement of the great nuisance, under the supervision of the Board, could have failed to notice the immense change for the better which at once took place when General Hastings assumed command. Order out of chaos, a sense of security, as contrasted with a feeling of apprehension and uneasiness, amounting almost to a reign of terror—more work

done and better done, with fewer men at work, because more thorough system prevailed the work was more intelligently arranged and the authority was centralized. Johnstown will ever be a monument to the efficiency of the National Guard of Pennsylvania —a body of citizen soldiery existing not simply on paper, and fit only for parade, but ready to take the field at a moment's notice, perfect in all its departments, prepared not only to repel invasions, or repress riot, but to undertake the management of a great work of relief, requiring varied attainments of administration. It is not too much to say, and it is saying very much, that the Guard, from the General in command to the lowest subaltern, proved itself equal to the emergency. The annual encampments, introduced of late years, have undoubtedly been the principal factor in familiarizing both line and staff with the routine duties of camp life and administration. The value of a well organized militia is, therefore, one of the important lessons of Johnstown.

But how did the Guard come to be upon the scene? What justification was there in a time of profound peace, in the absence of rebellion or riot, in defiance of the express provisions of the State Constitution, for placing a military force, with the entire General Staff of the State, in control of a territory as large as some European principalities. It was simply because the Legislature, yielding to the importunities of certain sanitary cranks had, a few years before, had the wisdom to create a State Board of Health. This Board possessed the authority to declare the conditions existing at Johnstown, and in the valley of the Conemaugh, Kiskiminetas and Allegheny rivers, a "nuisance prejudicial to the public health," and to call upon the Chief Executive of the State to furnish men and means for its abatement. Without this declaration the State would have been powerless to interfere, unless extra constitutional measures had been resorted to. The presence of the Guard at Johnstown was a striking exemplification on the grandest scale, of the truth of the proposition contained in the address of the Board, referred to in the opening of this paper, that, "It is no empty figure of speech by which we call disease a public enemy. It requires to be met with organized resistance, and this resistance must be directed by a responsible head. When pestilence threatens, that head must be clothed with powers analogous to those of a General when the foe is at the gates. Sanitary law, in place of martial law, is then proclaimed; and what are, in times of general health, recognized as sacred rights of person and property, are sternly set aside. When such emergencies arise, the Board confidently looks to the sound sense and self-control of the people to lead them to submit cheerfully to whatever temporary inconveniences it may be deemed necessary to impose." Such absolute powers the Board exercised at Johnstown. Such sound sense and self-control were displayed by the people of Johnstown under the most trying circumstances, leading them to acquiesce in restrictions which may have appeared to them harsh and unnecessary. Whatever, therefore, may have been the faults, failures or short-comings in the administration of the Board during its period of occupancy, it may, at least, be credited with having taught the lesson, and it is the last to which I shall advert, that a State Board of Health is the only constitutional authority which can cope with such an emergency, and that its powers, in the premises, are ample and supreme. Rarely has the truth of the motto of the Board, which has also been chosen as that of this Convention, received a more triumphant vindication. Let it be the rallying cry of the Sanitarian:

Salus Populi Suprema Lex.

# SOME REFLECTIONS ON MORNING SICKNESS.

BY B. E. HADRA, M.D., GALVESTON, TEXAS.

HE able and very practical papers on Morning Sickness (Vomiting during Pregnancy), in your journal (February 15), by Doctors Stewart and Jones, induce me to make a few suggestions in connection with the subject. Our present knowledge of the pathology is so scant that even unproved speculations may be worthy of some attention. For, all we have at our disposal is the handy term "reflex action," though it is merely a paraphrase of a physiological principle, known to be one of the most general and most vital functions of the nervous system. In no way is the secret lifted by this word; for, as a matter of course, the muscular action which is called "vomiting" must be governed by some nervous centre, which again in turn must have been set in action by some peripheric irritation. Thus, whether the vomiting is caused by tickling the pharynx, or by irritating the mucous membrane of the stomach, or of that of the bowels; whether the abdominal ganglia, or the nerves of the womb, or those of the cervix are primarily excited-under all circumstances, a reflex action will have been set to work. We, then, must not stop here and feel satisfied; we have to go behind this term. It is astonishing what practical progress has been made in brain and abdominal surgery since the assumption of a mere reflex action was superseded by the discovery of palpable lesions. It is hardly necessary to remind the reader of reflex epilepsies, reflex convulsions, reflex pains in female diseases, etc.; which have been unmasked of their undefinable "functional" nature, and proved to be so "organic," as to admit of their manual repair. Indeed, it is the duty, the very business of scientific medicine, to discover one link after another in the chain of the immovable complex processes in health and disease.

It is from such considerations that I offer something like an explanation for a certain class of vomiting in pregnancy, not by any means pretending that it will hold good in every instance. I look at them as cases of mild sepsis, whose starting point is situated somewhere, in the cervix, womb, uterine appendages, or in the intestine. This is not at all a new idea, but, perhaps, my arguments will have the merit of novelty.

In the Berliner Klinische Wochenschrift (No. 25, 1889), there appeared an article by Dr. K. Alt, which, freely translated, would carry the title: "Studies into the secretion of subcutaneously injected morphine by

the stomach." Dr. Alt states, in concurrence with previous reports of Doctors Warmé and Leineweber, that morphine, injected subcutaneously, appears in about two minutes and a half in the stomach. Prof. Hitzig (known as one of the main workers in brainlocalization) had some time ago observed that a dog had vomited after eating the vomit of another dog, to which morphine had been administered hypodermically. This observation led Alt to further experiments. Dogs' and men's stomachs were washed out after hypodermic injections of morphine had been given, and the fluids examined. Invariably the morphine was found, to even half of the amount injected. This clearly proved that the stomach acted as a secreting, or rather as an excreting organ for the morphine, which, of course, had circulated all through the system. Dr. Alt, from such facts, deduces that the vomiting, under such circumstances, is not due to an irritation of the nervous centres in the brain, or the medulla by way of the blood, but rather that it is caused by direct excitation of the nerve terminations in the stomach itself; of course, acting upon the motor apparatus by reflex action. A more direct proof of his theory he obtained in preventing the vomiting, after the morphine had been injected, by keeping the stomach free of the secretions by frequent washings.

This discovery, which seems to be accepted, at least in Germany, as fully verified, judging from a remark by Kobert in Fortschritte der Medicin (1890, No. 3, page 102), looked to me at first queer and absurd. Still, after a little reflection, it began to dawn upon me that there must be something wrong about our present views of the physiological functions of the alimentary canal. Have we not all too much looked at it as to a mere vessel which has no other purpose but to retain the chyme until the digestive fluids have made it absorbable, and until blood and lymph-vessels have sucked from it what they need for the system? Have we not underrated the highly developed glandular apparatus all through the alimentary canal by conceding to it nothing but the production of the digestive fluids? Is it not more likely that this complete glandular system is as well prepared as the lungs, kidneys, or skin to excrete from the body effete or useless substances? Would it take so great a stress of imagination to think that the fæces were not only the useless remnants of the ingested food; but that they also contained a part of the excreta derived from the systemic combustion and oxidation? Are the saliva, which is swallowed, the secretions of the ventricular glands, of the pancreas, of the immense number of intestinal glands, the secretions of the enormous area of mucous membrane really nothing but digestive fluids? According to Thiry the quantity of secretion from 30 am. of intestinal wall in the dog amounts to 4 grm. an hour. Should this great quantity of material have no other object but to prepare the chyme for absorption? Is not the daily experience with diarrhoea, and so much more with cholera, and all such diseases, where the intestine or the stomach becomes filled and refilled with fluids which are evidently drawn from the system, and which may contain the greatest variety of substances-is this not proving that the alimentary canal is a true excreting organ in health and disease? Now, there is nothing new in this; our thoughts only are, in the present period of medicine not much educated to look this way. Our fathers though, intentionally and purposely, set this apparatus to work to clean and clear out the system. Evidently they went too far, trying to drive out every disease by this channel.

Perhaps, though, the wheel will turn again. Think only of Tait's revival of the old treatment for peritonitis by free purging! But, again, it is proved that the mucous membrane of the stomach is capable of absorbing oxygen and returning carbonic acid. What better evidence is needed to claim for this organ a similar function to that of lungs, kidneys, and skin, that is of an excreting organ?

But to return to our vomiting. How could we better explain this phenomenon in infectious diseases, especially such as usually are called septic, but by supposing that certain poisonous substances, ptomaines leucins, toxins, or whatever we may call them, produced by and circulating in the body, become absorbed and excreted by the stomach, and that they there irritate the nervous terminations, exactly as is the case with the morphine injected hypodermically? Is there not a striking resemblance between the prevention of vomiting by washing out the stomach in Dr. Alt's experiments and the relief obtained from the same procedure in peritonitis? In both instances it will do good only until a new issue of the poisons will have accumulated in the stomach.

Now, it would be folly to contend that there is no other way vomiting could be produced; we only need think of the popular method of tickling the pharynx, or of the vomiting from pressure of meningitic deposits; also poisonous substances circulating in the blood may set the centres directly to work. Still, for the majority of cases, I see no better and no more enticing theory than the one given.

But what has that all to do with vomiting in pregnancy? Since I have read Dr. Alt's article I had occasion to see a few such cases. Those which were mild, were not examined per vaginam, and the usual remedies, especially menthol and resorcine, relieved them satisfactorily. I explained the action of such remedies as either counteracting the effect of the toxins on the nerve terminations, or by obviating their virulency chemically. But, in one case, which resisted all these remedies, and which was examined per vaginam, I found what is found so often, and what is, perhaps, the most frequent condition, a very active endo-cervical catarrh, with abrasions and excessively swollen lips, which closed up the canal so that the sticky discharges could not well come away. This case was promptly relieved by the well-known expedient of widening the cervical canal, and by keeping it patulous by daily careful manipulations until the condition of the mucous membrane was improved (by applications of a solution of nitrate of silver), and until the worst symptoms had ceased, which happene about a week after the beginning of the treatme How to make this meet my theory? I think that the toxic discharges, not finding a free drainage were absorbed into the circulation, and that the

poisonous material was secreted and excreted by and into the stomach, where it acted exactly like the morphine hypodermically injected, and that the usual internal remedies were not powerful enough to overcome the perhaps greater virulency, or the greater quantity of this substance. That as soon as drainage was established, absorption ceased, and the stomach no longer had to eliminate the virus.

Perhaps it may be asked why persistent vomiting is not found then in every pus-forming disease, or in cervicitis outside pregnancy at least? I would answer, that there is, in fact, very often present the most persistent nausea, and sometimes vomiting in the most widely differing septic conditions, produced either by retained purulent material, or by systemic infection. So it is in pyæmia, in swamp fever, and to some degree a nearly constant symptom of severe forms of endometritis, and, of course, in peritonitis. As long as there is good drainage, or as long as the surrounding tissues are not very much disposed to absorb (like in old pus cavities), there will be little infection, and consequently little stomachical disturbance. But in pregnancy, when the cervical tissues are so extremly succulent, the discharges so much more abundant, the circulation so much more active, it seems to me not so very strange that retained purulent material should be absorbed so infinitely more readily. Besides, the conditions of pregnancy itself may have some influence upon the nature of the toxins, and also upon the excitability of the nervous centres. I can understand that even a very slight, more or less physiological secretion, when retained higher up in the contracted cervical canal, may cause the morning sickness, and that, under such circumstances, though vaginal examination will reveal nothing abnormal, dilatation of the canal nevertheless may prove a successful remedy, not by detaching the ovum from the cervix, as some erroneously explained it, and not by some unknown reflex contortion, but simply by giving an outlet to the accumulated, and, perhaps, infected secretions.

## A CASE OF INGUINAL COLOTOMY.

BY BENJ. T. SHIMWELL, M.D.

N January 5, I was called to see M. C., thirty years old, who had been treated by her physicians for ovaritis, with incidental constipation. She gave a history of obstinate constipation, lasting over months, and complete obstruction for two weeks. An examination of the rectum showed a mass filling the entire bowel. This arose from the posterior wall: evidently from the sub-mucous tissue. It had none of the characteristics of epithelioma. The abdomen was tense, and very much enlarged. Marked dullness over the colon, which, even in the tense state of the abdominal walls, could be definitely outlined. There was a constant desire to defecate, with marked tenesmus; also, persistent vomiting, which partook of a fecal nature later on. On account of being ill I delayed the operation until the 7th inst. The patient was prepared for operation, which was to be governed entirely by the condition of the rectum; if it could not be made permeable, laparotomy for the purpose

of performing inguinal colotomy was to be done. The rectum was well washed out with bichloride solution. After a careful examination, I found it impossible to do anything with the canal. It was not permeable, nor possible to make it so. The new growth would not allow any interference with the knife; there was nothing left but colotomy. The abdomen had been prepared antiseptically. I made my incision in the left inguinal region one and one-half inches inside the anterior spine of the ileum, about one and one-half inches above Poupart's ligament, making it about three inches in length.

The descending colon was then brought into view and drawn out of the abdomen for the purpose of making a spur by suturing the bent walls together; but, as soon as the bowel lost the support and restriction of the abdominal wall, it began to distend with gas and fecal matter from the bowel above. The colon was four inches in diameter. Incipient gangrene was marked. The distension becoming so great, I was forced to incise the bowel to lessen the size, to allow of replacing in the abdominal cavity preparatory to suturing to the abdominal walls. This was complicating the case, as I had intended to suture the bowel to the parietal peritoneum before incising. When the bowel was incised, no hemorrhage took place, a grumous serous discharge oozing out. As soon as the incision was made a great quantity of gas and fecal matter was discharged. Care was taken that the surrounding parts were not contaminated. after the bowel was lessened sufficiently by this discharge, and washed with bichloride, it was replaced into the abdomen, the incised part being closed by a clamp. The next step was to suture the bowel and parietal peritoneum together. The peritoneum was caught up at the four angles of the wound by hæmostatic forceps and held.

As the vitality of the intestine was so low, it was a question if union would be got by this attachment. Having, in my experiments on the dog, found the value of the omentum as a means of union, I decided on using it to hasten the uniting of the parts, and see if its excessive vitality would not infuse new life into the intestine.

The omentum was then drawn down, and adapted to the bowel surrounding it on all sides. Having done this, I passed my sutures through the parietal peritoneum, omentum, and the serous and muscular coats of the intestine.

The suturing was commenced with catgut; but by an accident the catgut and silk in the pans got tangled and unfit for use, therefore I was compelled to finish the latter part of the suturing with silk. This silk had been rendered thoroughly aseptic. The operation was finished by bringing the abdominal incision together and fastening the mucous membrane of the intestine to the skin.

To show the low vitality of the intestine, and the advantage of the omental attachment in the abdominal cavity, the portion of intestine attached externally sloughed immediately. Primary union was got in the abdominal wound. This, unfortunately, by the welling up of fæces from the cavity left by the sloughing of the external bowel attachment, grad-

ually softened and separated until nearly all of the external wound surface was opened. This gradually filled up under antiseptic treatment. The silk sutures, instead of encysting, came gradually away. The case then progressed to recovery. The temperature, after the operation, never went over 100°, except one evening, when it rose to 101°.

Being compelled to go to bed immediately after the operation, the care and after-treatment fell on my friend, Dr. Herbert A. Starkey, who assisted me at the operation, and to his attention and skill is much of the good result due.

There is nothing special in this case, except two points, which I wish to make.

First, the result gotten by the use of the omentum, for I firmly believe that union would not have occurred between the peritoneal surfaces, if it had not been used, as the bowel's low vitality was shown by the rapid death of the part that was attached to the skin.

Second, the delay in the case prior to my connection with it. This is but an illustration of a number of cases that are so neglected. While this did not come on with the marked symptoms of obstruction due to strangulation, still the obstruction was positive. I mention this to emphasize the fact that if obstruction occurs and relief is not prompt, positive means should be taken to get the solution. This, fortunately, as far as I was concerned, was easily found. Still, the case would have gone on until death would have been the result, had not operative measures been taken.

#### MANIOC, OR CASSADA.

BY E. CHENERY, M.D.,

ROM the brief allusions to this substance by writers on materia medica, one would get but a slight idea of its importance as an article of diet in tropical countries, being the staple food for unnumbered millions of human beings—the staff of life in the West Indies, Brazil, and on the continent of Africa.

The plant from which this food is derived is known to botanists as Janipha manihot, and is a shrub, six to twelve feet high, and one or two inches in diameter. Except for the young leaves, which are used as greens, its whole value consists in its tuberous roots, which sometimes reach the enormous weight of thirty pounds, but usually range from one to three inches in diameter, and from six to eighteen inches in length. The shrub is said to be a native of Brazil, where it is known as mandioca or tapioca. Cassada is its name in the West Indies. It is not grown from the seeds, but from cuttings, having surprising vitality; for a cane of it, like Aaron's rod, will bud and grow leaves in your hand. Hence, it is only necessary to cut the stick into pieces of six to twelve inches in length, and thrust them into the ground, and it matters little whether the ground has been first broken for it or not. In eight to eighteen months the tubers are in their best state to produce the nutritous food-seventy per cent. gluten and thirty of starch; but, at a later period, the gluten becomes less and the starch increases. There is no food product which compares with it in resisting drought. Even in the dryest seasons, it is like other trees "planted by the rivers of water," and whole fields are green with its foliage, while all else is brown with the scorching sun.

There are two varieties of the manioc, known as the sweet and the bitter; the first of which may be eaten with impunity, while the latter has a bitterish, milky juice, which is poisonous from containing prussic acid. But these roots are grated or otherwise reduced to a pomace, and then suspended in grass bags. when the poisonous juice drips out, or, being volatile, is dissipated by the heat in baking bread from it. The bitter variety is the principal kind used in British Guiana, while the sweet is the one mostly cultivated in Africa. The tapioca which comes into our houses is almost pure starch, and is made from the expressed juice of the root, which, on standing, deposits in the form of powder, and which, if dried without heat, will remain so. If heat be applied, it takes the form of the irregular masses we are accustomed to see.

The root has the taste of chestnuts, and may be eaten raw. It is delicious, wholesome food when roasted in hot embers or broiled. If soaked till the skin can be drawn off and the fibrous heart drawn out and then dried, it makes good bread; or, if broken up and fried in palm oil and salted, it is a good relish, and the Africans call it bomba.

An extremely white and fine flour, called *fuba*, is made from the soaked and dried roots, and it is the chief food in Angola.

The flour makes a thick porridge or mush—funje. The water is boiled and salted and set off the fire; after which fuba is stirred in until it can be cut into blocks, which may be taken in the hands and eaten with molasses or dipped into chicken broth.

The staff of life on the Congo is quanga, or bread made from the manioc by soaking, peeling, and pounding the soaked root into a pomace, and kneading and making into dough-loaves of four by six or ten inches. These loaves are wrapped in thin, tough leaves and bound, and then boiled in large earthen pots. Then the bread is ready for use; or it may be sliced and browned or broiled, as one prefers.

Farina from the manioc is prepared by grating the green root, drying in the sun, with all the starch and tapioca in it, browning it slowly over the fire; after which it is eaten by stirring it into soup or boiled beans.

Grate, strain, and dry slowly in the sun, and you have a starch for puddings or any other purpose for which starch has demand in the market. Gluten being a nerve-food, indispensable to health and vigor of both body and mind, the great abundance of it in the cassada—nearly three times as much as in wheat flour—the cassada is pre-eminently "the staff of life," since there is no way by which its abundance of gluten can be wasted in preparation, as in wheat. There is a Providence here which shapes ends, since this chief food for tropical regions has so much nerve-supplying elements and so little of the heating elements, as compared with food in colder climates

But this abundant gluten, as compared with other foods for the sick, pre-eminently fits it for the sickroom, and especially so when we wish to increase strength instead of heat, and where any irritating and indigestible food-substances are forbidden. It requires longer boiling than starchy foods in general, and may be used in the form of thin mucilage or demulcent, or in a more solid form with sugar, lemon juice, nutmeg or other aromatics. I suspect that, as physicians, we should make immense gain in restoring from prostrating sicknesses by using more of this eligible substance in place of so much meat slops, and especially so in cases complicated with more or less gastric irritation. Meat foods must be excluded from the stomach in gastric ulcer. Why not, then, fall back upon this highly nitrogenous food for supporting the strength? Having so large a proportion of gluten over the starch, it offers immense advantages over wheaten and other bread in cases of diabetes where any starch at all is allowable.

# Society Notes.

ACADEMY OF MEDICINE, NEW YORK.

SECTION ON PÆDIATRICS.

Dr. J. Lewis Smith, Chairman, December 12, 1889.

THE paper of the evening was read by Dr. L. EMMETT HOLT entitled

THE ANATOMICAL CHARACTERS, NOMENCLATURE AND TREATMENT OF THE DIARRHCEAL DISEASES OF INFANCY.

Dr. Holt's paper was based on pathological and clinical observations of seventy cases of these diseases occurring in his hospital service, and in nearly all these cases an autopsy had been made, his observations extending over a period of two years. Dr. Holt dwelt strongly on the necessity of a new nomenclature for the diseases of children. Perhaps the simplest pathological division that could be made would be into diseases which possess lesions and those which do not. For clinical and descriptive purposes, the nomenclature should be reformed, the same name being used by various authors to indicate totally different diseases.

That many of the diarrhœas are the result of germ infection should be recognized, named and grouped together as mycotic diarrhœas.

Other diarrheas were the result of acute and chronic dyspepsia, others of catarrhal processes, while in still others there were marked pathological changes, such as follicular ulcerations, entero-colitis, enlargement of the solitary glands, or the formation of a croupous membrane.

His autopsies had all been made shortly after death, some as early as two hours, to obviate the port-mortem changes.

The commonest complication he found in these cases was broncho-pneumonia. One point on which he would lay particular stress was in the use of the name dysentery. Dysentery was a misnomer, and but a symptom common to several forms of intestinal

ulceration, and should not be used to indicate a

Discussion.-Dr. Caillé opened the discussion on the dietetic treatment, and dwelt strongly on its great importance. The diet of infants should be managed with care and judgment; proper food can be improperly given, and digestive and intestinal troubles result. In these cases abstinence from foods for twentyfour hours will work wonders; the child in the meantime taking mucilaginous drinks. Milk should not be used in the city without being sterilized, and the patent baby foods should never be used. Cow's milk can be perfectly adapted to the infant's use by dilution, adding sugar, and sterilizing. When we speak of sterilizing milk there is one important point: to be certain of the purity and condition of our milk before doing so. A predigested food is of the greatest value in building the infants up, and sustaining their strength.

The discussion on the mechanical treatment was opened by Dr. Koplik. The mechanical treatment, or gastro-intestinal irrigation method, aims to remove the source of irritation, to thoroughly cleanse the stomach. Dr. Holt lays stress on mycotic infection. By this mechanical method, if applied sufficiently early in the disease, the thorough washing out of the stomach will abort the disease. There are two varieties of the mechanical treatment, the stomach washing, and the intestinal irrigation. It is used in both acute and chronic cases, but is of particular value in acute cases.

Washing out the stomach offers the most rapid and complete method of clearing out that cavity, but washing out the stomach must be accompanied by due attention to diet and medicinal treatment.

DR. SEIBERT: I have had over six hundred cases of irrigation, varying from thirty-six hours' age upward, in the two and a half years I have used this method. I am called a short-sight enthusiast, but I am certain that I have done so much good that I do not mind that. Before we commence the dietetic treatment we should thoroughly wash out the stomach. I know that in ten years this will be the general treatment. I have cured undoubted cases of cholera infantum by this treatment.

Dr. Baruch thought that we now have ample warrant for believing that most summer diarrhœas in infants are due to a multiplication of micro organisms in the gastro-intestinal canal, introduced there by the milk food. These multiply in the stomach, precipitate casein rapidly, send it unprepared into the duodenum, and thus produce the pathological conditions pictured by Dr. Holt. Fermentation and decomposition incident to the accumulation of pathological products produce an excellent culture medium, in which the micro-organisms multiply, and develop ptomaines, whose ultimate effects are the alarming symptoms we encounter.

Dr. Baruch drew an analogy between puerperal infection and the infection of mycotic summer diarrhœas, from which he enforced the lesson that we should not rest satisfied until the same perfection has been attained in keeping the stomach aseptic as has been now reached in keeping the utero-vaginal canal aseptic. To the latter we are indebted for the

almost complete abolition of puerperal infection. The former can be accomplished only by rigid sterilization of the milk. Breast milk is sterile; so is cow milk in the udder. Breast-fed infants die only in proportion of three to one hundred of artificially fed. Soxhlet is entitled to the same credit as was Semmelweiss in the matter of puerperal infection. But he does not go far enough, valuable as are his results. He brings the milk just to a boiling temperature. This does not sterilize it. Pasteur, Schroeder, and Loeffler insist upon a temperature of 30° C., because they have discovered bacteria in boiled milk - although it was not sour-but none if the latter temperature had been reached. Soxhlet's apparatus is valuable, not because it sterilizes the milk, but because it shields it from contamination until it is put into the baby's mouth. Baginsky complains that its use has not correspondingly diminished cholera infantum. Whenever we will be able to bring to our babes milk that has been subjected to a temperature of 266° F. for half an hour, and has been kept pure and undefiled, we will reach the same degree of prophylactic success that the obstetrician enjoys to-day. Dr. Baruch deprecated the use of anti-mycotic drugs; they cannot be sufficiently concentrated to destroy bacteria. After sterilization of milk, the mechanical treatment is the most valuable.

Two points have been raised against stomach washing: one, that the catheter will not bring up the clots of casein. We may not bring them up through the catheter, but by the catheter we can fill the stomach full and overflowing, and thus by vomiting bring up the clots. The second objection is that we only clean the stomach of its contents, and do not affect the germs in the mucous membrane. It is true; but the same objection holds good in any form of irrigation, and no one denies the value of irrigation in surgery.

One great factor in favor of irrigation is, that it is absolutely without danger.

DR. FRUITNIGHT, discussing the medical treatment, spoke of the great value of opium in the diseases of children, but noted the great caution necessary in its administration. Squibb's compound tincture of opium he recommended in 1-5 m doses, after the first year. Opium may be administered by

the mouth, by enema, or by suppository.

DR. CHAPIN differed with the advocates of mechanical treatment. It is claimed that lavage does not remove the germs from the epithelium, and if that is so, we should wash out the stomach each time, before we give sterilized milk. I think that in many cases lavage is not necessary, and in some of my cases the washing did not do any I believe that lavage is a very valuable method of treatment, but that its sphere of application is limited. I have an objection to Soxhlet's apparatus: it does not sterilize the milk, and milk prepared by this method will only keep fresh two days. Sterilizing by steam will keep it five or six days; but by steam sterilization for an hour and a half I can keep it six weeks. I regard the irrigation method as being without danger, although the child's struggles and blue face make it better for us to keep the mother out of the room.

Under a careful application of dietetic rules, I do not think that irrigation would be needed so often.

DR. WINTERS: I am surprised to hear cholera infantum spoken of as of such common occurrence in a large experience. I have only seen three cases. They all occurred in tenement houses. In the mechanical treatment I can see nothing new. We have been using it for years; all of us here have used it, also our predecessors. We have emptied the stomach and intestine as a routine matter in these cases, not by irrigation, it is true, but by emetic and laxatives, which are as effective; and then, on a diet of sterilized milk, they will do as well as those who have been irrigated. Irrigation has been carried to too great an excess, and has been brought into disrepute. No matter how skilfully it is done, it will excite alarm, and carried out to the extent mentioned tonight will drive our patients over to the homœopaths.

DR. CAILLÉ: I do not agree with Dr. Holt in his proposal for a new nomenclature. Our knowledge is not yet so perfect as to warrant the change. In reply to Dr. Baruch, I would say that Soxhlet never claimed that his apparatus would completely sterilize milk. If the Soxhlet apparatus only preserves the milk for a few days, it is of great importance; a sufficient quantity can be made for daily consumption.

Dr. Seibert: I am having an improvement of Soxhlet's apparatus made, that can be sold for \$1.00.

Dr. Baruch said that he had seen cases of pure cholera infantum in the piney woods of South Carolina, and spoke of a case which the chairman had seen with him in that beautiful suburb of this city—Audubon Park. He referred to the great benefit he had derived in the latter from the cold bath, graduated from 90° to 80° F., followed by the cold pack, which rescued a desperate case (with 106° temperature) from imminent death.

A specimen of sterilized milk was presented to the Section, which was offered at a cost of \$3.00 per dozen of six ounce bottles (with rebate of 60 cents for bottles). Several members expressed the improbability of encouraging its adoption at such cost.

The Section nominated Dr. Holt as Chairman.

# The Polyclinic.

## PENNSYLVANIA HOSPITAL.

DYSMENORRHŒA, caused by a long conical cervix with backward displacement of the uterus and stenosis of the external os, can often be relieved by rapidly dilating the canal of the cervix with bladed dilators. This method of dilatation is better, in the main, than when done by an idoform-gauze tampon, or by tents of whatever kind. A current of warm water, rendered antiseptic, thrown continuously upon the cervix during the operation, will make its accomplishment easier. If stenosis exists at the internal os, it is generally due to flexion, and requires for its relief the introduction of the stern pessary after dilatation has been effected.—Godfrey.

## MEDICO-CHIRURGICAL HOSPITAL.

A USEFUL remedy for ulcers is atropine solution, four grains to the ounce of water. Painted over the ulcer, it relieves pain and promotes healing.

-Stewart.

Campho phenique is being tried by Prof. Stubbs as an antiseptic for surgical dressings, and as a remedy for injection into hemorrhoids.

Acute desquamative nephritis with hæmaturia was treated by Gerhard with the benzoate of sodium. The patient made a good recovery.

DR. TURNER, of the U.S. Army, in view of the wider fields of labor opening to woman, in her welcome to almost every profession, anticipates the time when she will no longer be the poor victim to be practiced upon, but will take her turn in practising upon the other sex. When that time comes, the Lord have mercy upon us from being the ladder on which she mounts to fame. "We may then find," says Dr. Turner, "our cremasters tucked and plaited for pendent scrotum; the prepuce flounced for redundency; the epididymis resected when the testicle is too low; our ureters catheterized, and the pelvis of our kidneys curetted; and Miss Cynthia Tate, more bold and brilliant than all the rest, will castrate for all manner of neuroses." When that millenium comes, the table may be turned with a vengeance, possibly, in many instances, to the great benefit of society.-Kansas Medical Journal.

TREATMENT OF STERILITY.—Dr. Robert Bancker Talbot, in a paper read before the New York Obstetrical Society, on April 16, 1889, laid down the following rules for the treatment of sterility:

1. Be careful in selecting your cases for operation.

2. Subdue all inflammation, as far as possible, before attempting dilatation.

3. When you dilate, do it slowly at first, using only the smaller-sized dilators to start with. But at the end, do not be satisfied with only a partial dilatation; open the canal to the fullest extent that is safe, thereby giving free drainage to all débris of tissues that may have resulted from the dilatation.

4. Use a pessary for some months following the dilatation.

5. Order your patient to have no connection with her husband until after her first menstrual flow following her discharge from treatment.

6. When you are through with the treatment, discharge her, and do not make any more examinations with the sound.

7. On discharging the patient, tell her she may have to wait a few months until the mucous membrane of the uterus has recovered from the injuries received from the dilators, and is restored to its normal condition, before pregnancy is liable to occur.

8. When practicable, advise your patient to remove to the country, or travel for a few months, where she will receive a complete change.

-American Journal of Obstetrics.

# The Times and Register

A Weekly Journal of Medicine and Surgery.

New York and Philadelphia, April 5, 1890.

WILLIAM F. WAUGH, A.M., M.D., Managing Editor.

THE TIMES AND REGISTER, REPRESENTING THE

PHILADELPHIA MEDICAL TIMES. THE MEDICAL REGISTER. THE POLYCLINIC.

THE AMERICAN MEDICAL DIGEST.

PUBLISHED UNDER THE AUSPICES OF THE

PUBLISHED UNDER THE AUSPICES OF THE AMERICAN MEDICAL PRESS ASSOCIATION,

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N the editorial corps of a journal like the TIMES AND REGISTER, which is in no sense the personal organ of any one of its editors, there is necessarily to be found a wide range of diverse opinion. Some members of the Association will be found to be staunch supporters of modern surgical gynecology; others advocate Apostoli's method; others look upon each as suitable for special cases. So with questions of ethics. The reference to Dr. Guernsey, in a recent number, gives the views of the writer (Dr. Waugh), but does not necessarily reflect the opinions of any other member of the Association. Dr. Baruch has most ably presented the hydrotherapeutic treatment of typhoid fever, and has rendered a service to the general practitioner, which, we trust, he fully appreciates, in showing how this method may be applied to private practice. Dr. Waugh, while acknowledging the great value of hydrotherapy in cases characterized by high temperature, and the excellent results of this method as a routine practice, believes the intestinal antiseptics strike more directly at the cause of the symptoms, and in most cases render the cold baths unnecessary. The other members of the Association have not as yet declared their faith in this important matter, much to our regret.

This explanatory note is prompted by the receipt of a letter, taking the journal to task for its alleged opposition to female physicians. In our issue of February 22, appeared an editorial upon the subject of co-education, by one of the members of our staff, who is responsible for some of the best work the journal has published. As the views expressed were not those of the managing editor, nor, so far as he is aware, of any other member of the Association, except the writer, the latter's initials were appended to the editorial in question. columns are to be considered an open field, wherein the utmost freedom, consistent with good sense and good humor, is manifested. Our honored correspondent is free to combat the views of the objectionable paper. We have already expressed our personal view upon the propriety of women becoming phy-

sicians; the success of one like Mary Putnam Jacobi, or Hannah T. Croasdale, fully demonstrating the justness of the sex's right to enter the profession, and their value to it. Scientific capabilities are not limited by sex; and if in the form of a woman resides the soul of a Sydenham, in God's name let her be free to work out her destiny, without the smallest hindrance on the part of the other sex. As to the co-education of the sexes, that is an entirely different matter; and one can second the demand of women for the highest education and fullest recognition in the learned professions, without deeming it wise that their training should be precisely the same, or accomplished in company with members of the male sex.

The tendency of education should be towards differentiation, rather than uniformity. The subjection of pupils of every degree of capacity to the same routine, too difficult for some, too easy for others; the opening of studies to all, which may benefit some and injure others; in fine, the endeavor to treat human beings with a uniformity which does not exist in nature, ignoring individual differences, is not in accordance with common sense. Educational facilities should be provided for women, fully equal to those for men; not necessarily identical with them.

If this is not done, and the schools for men are superior to those open to women, the latter have justice in demanding the right to enter the men's schools. Co-education, in many branches, is unobjectionable, when the considerations above mentioned do not apply; and the presence of each sex has been found to exert a beneficial influence upon the other. But in many cases, in the study of medicine, the attention of students of either sex would be diverted from the consideration of the subject before them to the presence of the other sex. The need of the times is rather for the extension and improvement of the colleges for women, than for their admission to those intended for men.—w. F. W.

# Annotations.

THE NOSE AND ASTHMA.

NDER this title an interesting article appears in the March number of the *Journal of Laryngology and Rhinology*. The nasal organ has of late years pushed itself into a position of undue prominence.

"Epilepsy, convulsions, vertigo; chorea, asthma, goitre, exophthalmic goitre, hemicrania, hay fever, various diseased states of the eyes and ears, retarded mental development, melancholia, 'trritation of the gastro intestinal, utero-ovarian, and genito-urinary tracts,' and other conditions have been considered to be originated or connected in some way with the nose."

And as the mechanical ability of our nasal specialists increases, and they learn to handle with still more celerity and dexterity the knife, saw, chisel and galvano-cautery, it may be that they will cure dyspepsia and warts by burning off the Schneiderlan membrane or razing to the foundations the turbinated bones.

This new craze of blaming every misfortune on the nose has about reached its limit; even the rhinological specialists—some of them, at least—are beginning to acknowledge that the world does not revolve about one's prophecies, and that there are some maladies—astigmatism and cramps, for instance—in which certain other organs may exert a slight causative action.

At any rate we advise them to confine the major part of their mining operations to men only, since the test of years has fully proved to the satisfaction of every self-respecting gynæcologist that all those miseries mentioned above, along with the remainder of the catalogue, depend in women solely on perversities of the uterus and ovaries, complicated, perhaps, with an occasional kink in the round ligaments.

The author of this article admits that the pendulum is now swinging back to its proper place, and that the nose is being stripped of some of its ephemeral dignities.

With regard to asthma, there are doubtless some instances in which it can be traced directly to the nose, and in which proper treatment of that organ will be productive either of a cure, or of at least much benefit; but there are many other cases which are evidently either of purely central origin, or at any rate due to a cause utterly unknown to us, and these cases even the substitution of a wax nose would not cure.

Let our intra-nasal surgeons tread softly and gently, then, along the floor of our nares, and handle with gloves, so to speak, the walls and roof, composed as they are of most quaint and ingeniously-carved scrolls, and hung with a membrane which rivals in subtileness of warp and woof and in intricacy of figure any tapestry the deft hand of mediæval highborn dame ever fashioned.—E. B. S.

#### INVITING YELLOW FEVER.

THE sanitary, or rather the insanitary, condition of Key West is the subject of a careful report by Dr. J. L. Posey, of the U. S. Marine Hospital Service. On account of poor drainage it is impossible in rainy seasons to go along even the principal streets dry shod. Though the average condition of the yards of the American and Spanish creoles is good, those of the negroes and Cubans, who constitute the rest of the population, are most filthy. Unfortunately, when yellow fever is about, it is the first two of these classes who suffer, for the negroes enjoy a remarkable immunity, whilst the Cubans are generally protected by an attack in childhood.

The privy vaults throughout the city are simply holes dug in the ground, each of which is covered over with sand and broken rock as soon as filled, in spite of a law requiring them to be emptied by means of an odorless excavating pump. Often in dangerous proximity to these is located the domestic water supply, an underground reservoir, excavated in the rock, and holding the washings from the roofs that come in the rainy seasons. A number of other

abominations exist, the whole assisting to form a most inviting nidus for the germs of yellow fever, and this, too, in the city which, of all the cities in this country, ought, from its peculiar position, to be kept most scrupulously clean. Several fatal cases of yellow fever have occurred in Key West this winter, and Dr. Posey thinks that the open character of the past winter, together with the city's highly unsanitary condition, are good grounds for expecting another epidemic of the fatal disease this summer.

-E. R. S.

DR. G. A. BLUMM, Superintendent of the State Hospital for the Insane, at Utica, N. Y., delivered a lecture at the Conservatory of Music, in that city, on March 26. He discussed the subject of music in its relation to the nervous system, and its application as a means of treating disease. The French first adopted music in the treatment of the insane. At the Utica asylum, there is a regular orchestra; and the army bugle-calls are used, instead of the courtyard bell. An interesting abstract of this lecture is given in the *Utica Press*, which closes in these words:

In briefly summarizing the results of my experience, I would say that we have in music an element of moral treatment that we cannot afford to neglect; that it is capable of rendering signal service if judiciously employed as an auxiliary to other means of treating the insane; and that institutions like the Utica Conservatory of Music, by spreading a knowledge of, and cultivating a taste for, music among our people, may take to themselves the credit of contributing in no small degree to the relief of the carking cares incident to the high pressure under which we live, and in consequence of which we become insane, and in so far aiding the physician in the fulfillment of his highest function, to wit, the prevention of disease.

# Letters to the Editor.

## INFLUENZA.

I WISH to place upon record the features of the recent pandemic as it has appeared in this part of the country. About the time that the telegraphic reports first called attention to a progressive epidemic which, to all appearance, was rapidly circumvesting the globe, I observed a few cases of illness having uncommon features. Within a week from that time "la grippe" was announced in eastern cities. As both lay and medical journals united in proclaiming it an influenza, its advent in that form was awaited with interest. The influenza failed to appear, but dengue did not; and, if I read aright, our "grippe" is identical with that which prostrated the people of the Eastern States.

As manifested to us, the onset of the disease was marked by subjective sensations of heat and cold, sometimes merging into a pronounced chill or chills; intense cephalalgia, photophobia, back ache, leg ache, general and intense bone ache. In a large number of cases, there was a prodromal stage of general malaise, but in most instances the attack was sudden. The excruciating pain over the entire body—but especially in the head, back, and legs—prostrated the victim. Defervescence was, as a rule, complete, in uncompli-

cated cases, in from twenty-four to seventy-two hours, the febrile movement rarely lasting longer. concomitant, complicating, and sequent troubles were bronchitis, pharyngitis, and follicular tonsillitis, the latter especially in children. In them (children) also, a rash frequently accompanied the febrile movement, and quite a number had severe pulmonary congestion. There was marked absence of coryza, conjunctivitis, or bronchitis in the incipiency, but in a majority of the cases, bronchitic trouble followed. Pneumonia, if it supervened, made its advent usually about the fourth or fifth day, and when the patient apparently had entered upon convalescence. In two cases, pulmonary hemorrhage, and in one, gastric hemorrhage, occurred suddenly in persons who were before, and are now, in perfect health, having no discoverable lesions of lungs or stomach. Menstruation was profuse in some cases, and interfered with to some extent in all. The extreme nervous prostration mentioned by eastern writers as succeeding the disease, was not especially noticeable here, a very small proportion of the cases only displaying it. Relapses were common, and in such cases the convalescence was retarded. There were no deaths from uncomplicated "grippe." My treatment, at first, was free mercurial purging, and antipyrine or phenacetine with quinine, in five-grain doses, every two or three hours, with Fothergill's mixture of hydrobromic acid for the bronchial irritation. Finally, I settled on the free mercurial purgation; a hypodermic injection of morphine and atropine for the pain, a second one being rarely needed, and the sedative febrile and cough mixture. In a large number of cases, the single injection of ten or twelve minims of Magendie's solution, with  $\frac{1}{96}$  of a grain of atropine, acted magically in alleviating all symptoms. Morphine alone did not have the same effect. Quinine was discarded until convalescence was established, and even then rarely used.

The origin of the epidemic could neither be attributed to, nor traced to, contagion. It overwhelmed the entire Southwest, and Northern Mexico simultaneously, and in point of time a little in advance of the extreme East.

Our country is sparsely settled; communication rare; nevertheless, isolated cowboys, prospectors, miners, ranchmen, and teamsters in all parts of the country were synchronously afflicted. The nature of the disease seems to be involved in obscurity, but I have no doubt that every physician who has seen dengue would give that name to "la grippe," had not the learned daily press diagnosticated and named it long before most of us had a chance to see it. Careful consideration of the symptomatology, as detailed in all medical periodicals that I have seen, impresses me with the belief that the epidemic is-or was-break bone fever. I read in some periodical, some weeks prior to the advent of the disease in the United States, that dengue was prevailing somewhere in Egypt; perhaps investigation might trace its course from that time and place.

JANUARY 30, 1890.

Since writing the foregoing, the usual winter influenza has made its appearance, and we are now in

the midst of an en- or epidemic, of that disease. Pneumonia is unusually prevalent. Is this "la grippe," or was its predecessor the true thing? To which, the fever or the influenza, is the name to be applied? They differ radically; the present disease being an influenza, pure and simple.

George Goodfellow, M.D.

TOMBSTONE, ARIZONA.

## Book Reviews.

PRACTICAL ELECTRICITY IN MEDICINE AND SURGERY. By G. W. OVERALL, M.D., pp. ix, 128, 8vo. Memphis Printing Co., 1890. (For sale by J. H. Vail & Co, 21 Aster Place, New York.)

This book is divided into four parts, treating of Electro-Physics, Electro-Physiology, Electro-Therapy, Electro Surgery, and an Appendix giving directions for the making of various battery fluids, and hints for the care of apparatus. As a whole, the work is reliable, although the advocacy of the so-called electric baths occupies room which could better have been given to other more important points. practical electrotherapeutists have given up baths because the current is carried around the patient instead of through him, and the impedimenta required is troublesome and expensive. The "General" and "Central" methods of application serve every purpose which baths cover, and either plan is greatly preferable. Considerable writing is devoted to Static Electricity, and wisely so, for this branch has been neglected too much in the many books given out lately. The book will be a good guide to the student who cares for a compact one, and it will serve him well as a reminder of many points-little in themselves, but great in their consequences, if not properly handled. It is well printed, and the illustrations are good, the applying electrodes being mainly taken from the facture of the McIntosh Company's products, which are known as both elegant and well-made.

A TREATISE ON MATERIA MEDICA, PHARMACOLOGY, AND THERAPEUTICS. By JOHN V. SHOEMAKER, A.M., M.D., and JOHN AULDE, M.D. Volume I. Devoted to Pharmacy, General Pharmacology, and Therapeutics, and Remedial Agents not Properly Classed with Drugs. Philadelphia and London: F. A. Davis, Publisher, 1890.

The present volume contains 353 pages, besides numerous blank leaves for manuscript notes. Part I deals with the elements of pharmacy; classification of medicines, with a brief outline of the properties of each class; modes of administration, and dietary. Part II treats of electro-therapeutics, oxygen, hydrotherapy, massage, heat and cold, mineral waters, with chapters upon metallo-therapy, transfusion, hypnotism and suggestion, earth-dressing, Baunscheidtismus, climatology, light, music, blood-letting and suspension. It will be seen that this volume deals with the newly-developed methods of treatment, leaving the galenical preparations for the forthcoming second volume. Bold-faced type is used for prominent words; a good device for arresting the attention, but rendered of little or no use here by its too frequent employment. There is a little carelessness,

probably due to inexperienced proof-reading, in arranging such remedies as alum under the head of mineral acids, hyposulphite of lime under phosphorus alteratives, etc. In the chapter upon oxygen, two pages are wasted upon an account of the discovery and preparation of the gas, which is out of place in a work on therapeutics. The succeeding chapters contain valuable accounts of the therapeutic measures which have recently attracted much attention. The claims of their advocates are stated fairly, and a judicious conservatism is displayed in the author's comments. Those who wish for trustworthy descriptions of these methods, free from the over-enthusiasm of the originators, can hardly be as well suited as with the work before us. We regret that Dr. Baruch's good work, in adapting hydrotherapy to the wants of the general practitioner, has not received the credit it deserves; but it is idle to expect any work to go to press without such omissions. Altogether, the authors are to be credited with having produced a really valuable book on therapeutics, which contains much which is not to be found in previous works on the same subject, and on precisely the topics of greatest interest to the practitioner.

SPINAL CONCUSSION: Surgically Considered as a Cause of Spinal Injury, and Neurologically Restricted to a Certain Symptom-Group, for which is Suggested the Designation Erichsen's Disease, as One Form of the Traumatic Neuroses. By S. V. CLEVENGER, M.D. Philadelphia and London: F. A. Davis, Publisher, 1890.

Railway injuries and railway surgery are among the most interesting questions of the day to a very large part of our profession. Dr. Clevenger has collected the scattered essays upon spinal concussion, and has reviewed the whole subject. He adheres to the spinal origin of the affection, believing that the spinal sympathetic nervous system is the main seat of the disease. After a historical introduction, he takes up the works of Erichsen, Page, Oppenheimer, and others; following with illustrative cases from his own practice and that of others. Then follow chapters upon Traumatic Insanity, the Spinal Column, Symptoms of Spinal Concussion, Diagnosis, Electrodiagnosis, Pathology, Treatment, Medico-legal Considerations, and a Glossary. The author has shown that, even in the deluge of books pouring out of the medical press, a valuable work can be produced upon a subject of practical importance, which is not yet exhausted.

THE INTERNATIONAL MEDICAL ANNUAL AND PRACTITION-ER'S INDEX FOR 1890. Edited by P W. WILLIAMS, M.D., Secretary of Staff, assisted by a Corps of Thirty-six Collaborators—European and American—specialists in their several departments. 600 octavo pages. Illustrated. \$2.75 E. B. Treat, Publisher, 5 Cooper Union, New York.

The eighth yearly issue of this handy reference, one-volume manual is at hand. In its Alphabetical Index of New Remedies and its Dictionary of New Treatment, it richly deserves and perpetuates the well-earned reputation of its predecessors. In this volume, its corps of department editors has been largely increased, and important papers upon Thermo-therapeutics, Electro-therapeutics, Sanitary Sci-

ence in City and Country, and the Medical Examiner in Life Insurance are features of special interest. It is truly a helpful volume, a resumé of the year's progress in medicine, keeping the busy practitioner abreast of the times, with reference to the medical literature of the world. While there is a generous increase in size and material, the price remains the same—\$2.75.

# Pamphlets.

The Scrofulous Diathesis. By Prof. I. N. Love, M.D., of St. Louis, Mo., eight pages. Simply a review of this important matter. Special stress is laid upon the value of the Syrup of Hydriodic Acid.

Epidemic Influenza of 1861 and 1863, and of 1889-'90. By James J. Levick, M.D., twenty pages. A comparison of the three epidemics with suggestions as to the best mode of treatment, and reference to the comparative mortality of the epidemics.

On the Choice of Methods in the Treatment of Uterine Cancer. By A. Reeves Jackson, A.M., M.D., twelve pages. A plea for the more permanent employment of cauterization and partial amputation of the cervix in carcinoma uteri as opposed to operative procedures.

Lesions of the Cauda Equina. A Clinical Lecture delivered at the Philadelphia Hospital. By Charles K. Mills, M.D., fifteen pages. Of extreme interest and value to the general practitioner as well as to the neurologist.

Inflammation of the Vermiform Appendix. By Thomas G. Morton, M.D., forty-four pages. This article is enriched with the reports of seven cases of excision of the vermiform appendix for perforative appendicitis. It is very interesting as well as valuable.

The Cause of Death from Chloroform. By H. C. Wood, M.D., Professor of Materia Medica and Therapeutics in the University, and H. A. Hare, M.D., Demonstrator of Therapeutics, twenty-six pages. The results reported by the recent Hyderabad Commission render a perusal of this paper of great interest. The experiments of Drs. Wood and Hare do not confirm the conclusions of the Commission.

Forty-second Annual Report of the Trustees and Superintendent of the Indiana Institute for the Education of the Blind. The rapid growth of the Institute has necessitated an appeal for more commodious and better equipped buildings to more fully carry out the desires of the Trustees. Great improvements are noted, especially the introduction of natural gas in all places where fires were used.

# The Medical Digest.

ROBSON (Hospital Gazette) found digitalis of great value in the treatment of post-influenzal pneumonia.

ANTIPYRINE has been used for incontinence of urine where belladonna and bromides had failed. Twenty grains, given two hours apart, before bed hour, is the minimum dose.—Kansas Med. Jour.

ELECTRIC ALARM CLOCK.—Among the recent applications of electricity to household use, is an electric alarm clock, which most effectually calls attention to the hour at which it is set. A small lamp also throws a light upon the face of the clock, when a button which is fixed by the side of the bed is pressed, so that the time can be ascertained without the necessity of getting out of bed, and the consequent imperiling of that most inestimable boon, the morning nap.

—American Analyst.

J. F. BALDWIN (N. Y. Med. Rec.) reports a case of papilloma of the larynx cured by intubation. The papilloma had attained such size that the life of the little patient, a child of eight, was in danger. As large a tube as possible was inserted, and by its pressure on the growth absorption took place.

#### TREATMENT OF PRURITUS ANI AND VULVÆ .-

RHyposulphi	te	0	f s	od	a							15.0
Acid carbol	ic											2.5
Glycerini .								. •				8.0
Aquæ												120.0
MSig. Lotio.												
	-	-	D	ut	li	n	To	nu	rn	al	1	1ed. Sciences.

IRVING D. WILTROUT, M.D. (Northwestern Lancet) calls attention to the fact that melancholia is often associated with a large amount of oxalate of calcium in the urine. He notes several cases of complete cure, or at least of great improvement, by the administration of nitro-muriatic acid, along with an occasional purgative.

EARACHE.—Take five parts of camphorated chloral, thirty parts of glycerine, and ten parts of the oil of sweet almonds. A piece of cotton is saturated and introduced well into the ear; and it is also rubbed behind the ear. The pain is relieved as if by magic, and, if there is inflammation, it often subsides quickly.

ONE of the best local applications for swelled testicle is a poultice composed of one part of tobacco to four of linseed meal. The meal furnishes heat and moisture, while the tobacco usually relieves the pain in a short time. This same poultice is very soothing when applied over the pubes in cystitis.

-Kansas Medical Journal.

## A REMEDY FOR NEURALGIA WITHOUT MORPHINE:

		-	 		 		
R	Antipyrin					3 iij.	
-	Ex. cannabis Ind.						
	Ex. aconite				āā	gr. vss.	
	Caffein						
	Hyoscine hydrobron						
	into thirty capsules					0 /0	

-Journal of American Medical Association.

THE following cough mixture is highly successful, and does not disorder the stomach:

R	Morphin. bimecon	at	is				gr. j.
	Ammon. muriatis						3j.
	Aquæ camphoræ						3 iss.
	Aquæ q. s. ad						Ziij.
io	One teaspoonful as r						0 0

-Journal of the Respiratory Organs.

CHEST PAINS.—For the troublesome pains located under the sternum, and elsewhere in the chest, frequently complained of in bronchitis, M. W. Emerson, M.D., has found this formula of much value:

R	.—Sodii salicylatis,
35	Potassii nitratis,
	Pulv. ipecac. et opii
	Fiat capsula j.
Sig	Every three hours

-College and Clinical Record.

OINTMENT BASE.—An ointment base which is but little known and used in this country is one which makes an elegant preparation, and known as unguentum pomadini. Its formula is as follows:

ROlei	cacao									dr.	I.
Olei	amygda	ala	art	ım	1	lu	lc.			oz.	2.
Olei	rosarun	n								q. 8	M

In winter, three ounces of the oil of sweet almond should be used, in order to secure the proper consistence required.—St. Louis Clinique.

Schmitt (Revue de Thér.) finds pyrodine objectionable, in that it is not a uniform substance; its use is liable to be attended by unexpected accidents, even in small doses, and it does not always produce its antithermic and analgesic effects. Still, it is an energetic febrifuge, though not superior to the other antipyretics. As an analgesic, it is not equal to antipyrine, etc. Its toxic action is shown on the blood and nervous system more intensely and profoundly than that of the anilines.

W. P. BARTON (Memphis Jour. Med. Sciences) believes that so-called malarial hæmaturia is, in reality, hæmaturial cinchonism, since he has never met with a case in which the advent of the hæmaturia had not been preceded by the administration of large doses of quinine. Further, he discovered that continuing the quinine in such instances was likely to render the patients' condition worse; but that instant stoppage of the quinine, and the substitution of calomel, or sulphate of magnesia and turpentine, produced the best results. He cites a number of cases in proof of his position, which is directly opposed to the one that generally obtains.

LACHRYMAL AFFECTIONS.—The treatment of obstructions of the lachrymal passages is one of the therapeutical fields which seems to have escaped the attention of recent observers. Stricture in these delicately-organized passages is far more common than in the male urethra. Since Mr. Hulk and Sir Wm. Bowman made their contributions, nothing has been added to either the pathology or therapeutics of this important class of diseases. The knives of Stilling and Weber, the syringe of Anel, and the probes of Bowman have each their useful place, and, per contra, each have proven instruments of danger. The relation of lachrymal diseases to nasal affections seems too often neglected.—Progress.

FRANK H. INGRAM, M.D. (Journal of Nervous and Mental Diseases), contributes an interesting statistical article on epilepsy. His observations extended over a period of eight months, an average of at least eighty-five patients being constantly under inspection. During the period mentioned, one hundred and ten epileptics had slightly over 11,000 distinct epileptic seizures.

The monthly average of these was 1,232—diurnal, 718.75; nocturnal, 513.25. Average for each patient, 14.495—diurnal, 8.547; nocturnal, 6.038. The average for June was much higher than that of any other month, being 22.31 for each patient—diurnal, 12.25;

nocturnal, 10.05. The high number of seizures for June is probably traceable to the great barometric changes experienced during that month, and the excess of day attacks over those occurring at night to the greater number of causes of excitement met with during the day that are wanting at night.

With regard to treatment, about one-half the patients were given bromides, and the others nitroglycerin, iron, digitalis, and other drugs, which seemed to do about as much good. The bromides, he says, seem especially adapted to some cases, but their ultimate effects are so undesirable as materially to affect the value of the drug.

RÖTHELN.—In a short review of this interesting disease, illustrated by the history of some cases, the following conclusions are reached:

1. Rötheln usually appears in epidemics.

2. It is a specific disease, distinct from measles and scarlet fever. (Having had both scarlet fever and measles is no preventive of rötheln.)

 It has an incubative period of from ten to fourteen days.

4. After the first outbreak, it is usually conveyed by contagion, but in some cases it may be conveyed by fomites. (The conveyance by fomites occurs only during desquamation, and this takes place only in severe cases.)

5. It embraces every period of life, but is more prevalent in childhood.—Spiers, in *Medical Brief*.

PRESCRIPTION FOR PSORIASIS.—The favorite prescription of Mr. Jonathan Hutchinson for psoriasis is:

At night the patient should wash the diseased surfaces free from all scales; then, standing before a fire, rub on the ointment, devoting, if possible, half an hour to the operation. This proportion of chrysophanic acid is not irritating, and stains the linen but slightly. With some cases, even a weaker chrysophanic ointment is entirely sufficient. Internally, Mr. Hutchinson prescribes arsenic, though he is not convinced that it is an important adjunct.

-Archives of Surgery.

Ar the Clinical Society of London, West described a case of Cheyne-Stokes breathing in granular kidney. The respiration was forty to the minute; cycles occurred once a minute, and the pain lasted thirty seconds. This continued for two weeks, and, after a remission, recurred. Points of interest were:

1. The long duration of the Cheyne-Stokes breathing.
2. Replacement by simple intermission instead of pauses.
3. Disappearance of the pauses while the rise and fall of respiration continued.

Dickinson reported a case of diabetic coma, treated by the injection of saline fluid into the veins. One hundred and six ounces were injected within one and a half hours. Consciousness returned ten minutes later; but the coma again supervened, becoming complete the following day. Three hundred and

fifty ounces were then injected, whereupon consciousness returned in forty-five minutes, and lasted thirty hours. She then died, in a comatose state.

Pye Smith detailed a case of acute universal desquamative dermatitis following the administration of chloralamide in full dose.

CROUP AND DIPHTHERIA.—The following extract from the *Sanitary Record* illustrates the practical identity of membranous croup and diphtheria:

A serious outbreak of diphtheria in Mansfield has been traced to a case of so-called *membranous croup*, and emphasizes the necessity for health boards to treat these diseases as identical, so far as all measures for their prevention are concerned.

In the outbreak at Mansfield, a child died with what the attending physician pronounced membranous croup. The case was not reported to the health office, and the child, dying on Monday, was not buried until Wednesday, scholars having set up with the corpse, and a public funeral being held.

Two children in the same family, and one in a neighboring family, were taken about this time with genuine diphtheria, and a number of persons were exposed to the disease.

TREATMENT OF POLIOMYELITIS ANTERIOR ACUTA. -Dr. Deahofe, in the Journal of the American Medical Association, treats of this subject very fully. He claims that during the initial stage of the disease, before paralysis has occurred, the treatment must be purely symptomatic. In the well-developed disease, rest in a recumbent position is most essential. As regards further treatment there is much diversity of opinion. The ergot treatment is energetically advocated by eminent authorities, while others equally as eminent, claim that no good results follow the use of ergot, and press the merits of the belladonna treatment. The same discord exists as to the advisability of using electricity in this condition. The author joins with Erb in asserting that its results are not precisely brilliant. It should be employed in cases where the muscles have not entirely lost their contractibility. Its action should be aided by the use of strychnine, especially administered hypodermically, two or three times a week. Tonics are needed in all cases. The prescription of Prot. Hammond is recommended:

RStrych. sulph										gr. j.
Ferri pyrophos.										3ss.
Acidi phos. dil.										
Syr. zingib										
MS. Twenty minims	1	hr	ee	ti	m	28	di	ril	V.	

With regard to corporeal endometritis, from slight causes, Ernest Hermon (Brit. Med. Jour.) considers that the main point is to alter the conditions which have set up the disease, and to use remedies which diminish congestion of the pelvic organs, namely, recumbency, laxatives, local use of glycerine, and the hot douche. In the more chronic forms the curette and strong applications to the endometrium must be resorted to. Dr. More Madden believes that endometritis is the most common trouble the gynæcologist meets with, and calls attention to the facility with

which it may be cured, instancing the following

1. The uterine cavity is made accessible by rapid dilatation of the cervical canal with his own form of dilator. 2. The disease of the endo-uterine membrane is thoroughly curetted. 3. The denuded surface is brushed over with iodized phenol. 4. The generally hypertrophied uterus is supported by a properly fitting Hodge's pessary, so as to take off the weight and lessen the congestion of the diseased organ. 5. The patient's general health is carefully attended to by appropriate constitutional treatment in every case.

FAVORITE PRESCRIPTIONS. - For Infantile Convulsions: Dr. A. Jacobi, of New York, an authority upon diseases of children, first orders a purgative dose of calomel in cases of infantile convulsions, and then follows it in a few hours by:

R.—Chloral hydrat. . . . . . . . gr. iv. Potas. bromid. . . . . . . . gr. viij. Syrupi 

M .- Sig. One dose for a child two years old.

Anæmia with Amenorrhæa: J. Milner Fothergill's prescription for amenorrhœa accompanied by anæmia, is as follows:

R.-Acidi arseniosi . . . . . . . gr. j. Ferri sulphat. exsiccat. . . . . . 3ss. Pulv. pip. nigr. . . . . . . . . . . . . . . . 3j. 

M.-Et div. in pil. No. xl. Sig. One twice a day, after meals.

Vomiting of Pregnancy: Goodell recommends:

R.—Cerii oxalat. . . . . . . . . gr. j. Ipecacuanhæ . . . . . . . . gr. j. Creasoti . . . . . . . . gtt. ij.

M .- Sig. This is to be taken every hour until nausea is

-Kansas City Medical Index.

THE IMPORTANCE OF DRAINAGE IN THE TREAT-MENT OF DISEASE OF THE UTERUS.-W. Gill Wylie, M.D., of New York, has drawn the following conclusions upon the importance of drainage in the treatment of diseases of the uterus:

- 1. Perfect drainage of the uterine canal is of the utmost importance in all diseases of the endometrium.
- 2. It has been practically overlooked by gynecologists, and its importance disregarded in treatment.
- 3. That it can best be secured by free dilatation, by means of a steel dilator used once a week, not too near menstruation, and supplemented by hard-rubber drainage-plugs, curetting, and intra-uterine applications, if indicated.
- 4. That in many cases to-day being treated by the use of pessaries, and called cases of anteflexion and retroversion and flexion, all symptoms can be permanently cured in a few weeks by the use of the dilator, the drainage-plug, curette, and simple intra-uterine applications, properly made.
- 5. That sponge or other tents left in the os, and obstructing drainage for more than a few hours, should never be used, for they not only obstruct drainage, but are liable to cause uterine contractions, and force the contents of the uterus out through the

Fallopian tubes, and cause local peritonitis, etc. By the use of a colpeurynter to soften the os uteri, it can be rapidly stretched by dilators, or Barnes' rubber

bags, without interfering with drainage.

6. That the same objections are applicable to vaginal or uterine tampons, as frequently used to stop uterine hemorrhage, as have been made to the sponge tent, and that by the proper use of hot intra-uterine douches of 120°, after dilatation, or by tying or compressing with forceps the circular or other large arteries, with very rare exceptions all uterine hemorrhages can be controlled; and if a tampon is used, it should be left in place only a few hours, and, of course, be prepared by being soaked and squeezed out in a solution of bichloride of mercury, or some reliable antiseptic.

7. That, with few exceptions, the many cases of chronic uterine catarrh treated by the use of hot douches, rest, and iodine to the vaginal vault, can be readily cured by, (1) improving the circulation of the pelvis by means of boroglyceride and alum solution, applied twice a week, on long, firmly-rolled cotton pledgets; and, (2) by dilating, with a steel dilator, about two or three times a month, and properly making simple carbolic acid intra-uterine applications; and, if indicated, the use of the curette and hard-

rubber drainage-plug.

8. That the same treatment will give better results in those obstinate cases of chronic uterine diseases in which the use of chromic acid, nitric acid, and other strong caustics, or the actual or galvanic cautery, has been resorted to.—American Journal of Obstetrics?

INDICATIONS FOR AND AGAINST TRACHEOTOMY IN CROUP.—In the first place, I wish to put in a plea for early tracheotomy in cases of simple membranous

The younger the child the earlier should the operation be done, lest a convulsion or spasm of glottis

carry it off suddenly.

If, in a case of acute laryngeal catarrh, or other severe inflammation in this neighborhood, acute laryngeal obstruction supervene, indicating œdema glottidis, and leeches and emetics do not give speedy relief, we must be prepared to operate without delay.

In cases of croup, Henoch says, "The onset of the first threatening attack of suffocation—in fact, even the forcible indrawing of the lower part of the chest wall on inspiration - is to me the signal for tracheotomy.

. . . To delay the operation longer only increases the exhaustion, the danger of carbonic acid poisoning, and the broncho-pneumonia which is in process of development."

I would express my own views in this way: It is not a question of how many hours shall we wait, because some cases run their course with alarming rapidity, while others move comparatively slowly.

If, in spite of the measure previously described, there is no improvement, if the cough remains unchanged and stridor increases, do not persist in emetics, do not wait for restlessness and lividity and dyspnœic attacks, but operate without further delay.

If you have decided that tracheotomy is called for, and the parents or friends plead for postponement, and after, it may be, many hours, when the child is moribund, they give their consent, do not refuse, but do not be eager, to operate. It will give you great anxiety, it will cates you endless trouble, and in the end it will almost certainly die.

Bronchial croup, shown by the expectoration of little bifurcating tubes of membrane; severe pneumonia or capillary bronchitis, shown by rapid breathing, contra-indicate operation, but the milder forms do not. Extreme prostration without evidence of asphyxia contra-indicates. If the case is one of laryngeal and pharyngeal diphtheria, I should say, do not be in a hurry to operate. If "those classed as diphtheria mostly die," it may be taken as an argument, on the one hand, in favor of early operation, and on the other, in favor of late operation. I am decidedly in favor of the latter. Rose Cormack says: "In many benignant cases the false membrane begins to loosen spontaneously, and to be got rid of between the fifth and seventh day."

My own feeling is that the membrane in diphtheritic croup begins to soften and break down sooner than in other forms of croup. Carry out the instructions previously outlined, minister to the child's comfort and well-being in every possible way, and then watch and wait. And whilst ready at any moment, let operation be your last resource. Whilst the child is fairly quiet, and the complexion good, even if there be great stridor, you can afford to wait. By so doing you will occasionally have the great joy of finding the stridor diminishing, the cough softening, and the patient at length in safety.

-Denby, in The Medical Press and Circular.

PREVENTION OF TUBERCULOSIS. —At a recent meeting of the German Public Sanitation Association Prof. Heller introduced the subject of the prevention of tuberculosis. He believes that tuberculosis is to be regarded as the most important of all diseases, in that it furnishes the largest mortality of all causes of death. It is also the most important from the standpoint of social science, because its victims die after a long illness, during which their earning capacity is lessened or destroyed, while during life they are a constant menace to their fellows. From microscopical preparations Heller estimates the number of tubercle bacilli in the sputum of a tubercular subject at 1,000,000 per cubic centimeter; in a single expectoration, on an average, 3,000,000 bacilli are discharged. The control of tuberculosis should be urged most vigorously by state and community; such warfare promises a very important diminution, if not complete extermination of the disease. Koch's bacillus is the cause of the disease; its appearance outside of the animal organism has not been proved, although it is able to preserve its infective properties for a long time. The bacillus of tuberculosis may be acquired (a) by transmission, though this is of minor significance; tuberculosis has never been observed in the new-born; the earliest age at which it has been observed is nine weeks after birth, the interval which is necessary for the outbreak of the disease after infection has taken place; (b) by direct or indirect conveyance from other tubercular human beings; the chief source of infec-

tion is the sputum; (c) by direct or indirect conveyance from tubercular animals, especially by their milk and by such parts as serve for food.

As measures to be taken against the spread of tuberculosis, mention may be made of the disinfection of the sputum in schools, regular cleaning with water and disinfection of the school-rooms; the erection of disinfecting stations throughout the community, with the instruction of people regarding the technique of disinfection; repeated disinfection of dwellings and the utensils of tubercular invalids; the enforced disinfection of dwellings and effects of those who have died from tuberculosis; attention to the health of wet-nurses, midwives, and attendants upon the sick; the supervision of those who are engaged in the preparation and sale of food stuffs, with the exclusion from such employments of coughers; the careful hygiene of hospitals, prisons, orphan asylums, and all similar institutions; the instruction of the populace: the strict enforcement of meat inspection: attention to breeding of tubercular animals; the inspection by veterinaries of the stabling where tubercular animals are found; the destruction of all animals found to be tubercular, with at least partial compensation to owners; the inspection of milk depots.

After the discussion, a resolution was adopted by the Association, which recommended the earnest attention of the State and municipal authorities to the above rules of prevention.

-Wiener Med. Woch .- Jour. Am. Med. Assn.

#### RUSSIAN TRANSLATIONS.

By EPH. M. EPSTEIN, M.D.

Bromide of Gold in Epilepsy.—Private Docent S. N. Daniels reported to the Society of Psychiatrists. in St. Petersburg, eight cases of epilepsy treated with the above remedy, five males and three females, of the ages of fourteen to thirty years; 0.5 grm. (8 ges.) were divided into forty pills, of which four a day were given the first few days, and then increased gradually to twelve in twenty-four hours. The results were favorable. After two weeks' trèatment with this remedy, the attacks became less frequent. and shorter in duration. In one fourteen-year-old girl, who had epileptic attacks once or twice a week, they did not occur at all for the last four months, after one month's exhibition of this remedy. In three cases the remedy did not change the aspect of the disease. In not one of the cases were there any complaints of unpleasant phenomena, as e. g. cardiac palpitations, or gastro-intestinal disturbances. In two cases only were noticed loss of sensation in the pharynx and velum palati. The author was unwilling to make conclusions from such a small number of cases, being of the opinion that all new remedies in epilepsy give favorable results at their first administration.- Vratch, No. 6, 1890.

CHLOROSIS AND VENESECTION.—In the year 1887, Dr. Dyes, of Hanover, published a pamphlet entitled: "Die Bleichsücht und sogenannte Blütarmuth, deren Entstehung, Wesen und gründliche Heilung," (Chlorosis, and the so-called Blood-poverty, their origin, nature and radical cure), Berlin. As it was

to be expected, under present accepted views on therapeutics, the great majority of German physicians looked upon the strenuous advocacy of Dr. Dyes, in his pamphlet, to cure those ailments with small abstractions of blood, as sheer absurdity. And yet Dr. Dyes finds now a supporter of his methods in Dr. A. Wilhelmi, who gives the history of thirty cases of spanemia and chlorotic asthenia treated with bloodletting, in a pamphlet published by him, and entitled: "Chlorosis and Venesection" (Bleichsücht und Aderlass, Züstrow, 1890, eighty-seven pages, in 8v.) Dr. A. Wilhelmi first decided to try Dr. Dyes' method on a case of the highest degree of chlorotic asthenia, which yielded to no remedies. The results obtained in this case were so unexpectedly successful, that he pursued the same course of treatment in a series of similar cases. He followed the directions given by Dr. Dyes, with the exception of abstracting, at first, half the amount of blood recommended by Dr. Dyes, who advises one gramme (16 grs.) for every pound of bodily weight. During the venesection, the patients were kept invariably in the supine position, and were not allowed to rise before the next day following. The perspiration, which usually follows venesection, was assisted by hot drinks of coffee, tea, and milk, and wrapping up the patients with blankets. The method of venesection treatment was not used indiscriminately in all cases of spanemia, but only in such where the oxihemoglobine of the blood showed a diminution below 11 per cent., using the Hematoscope of Hénocque, and taking 13 per cent. as normal. In the first eighteen of Dr. A. Wilhelmi's cases, which were girls, of the ages between thirteen and thirtyfive years, and in all of whom the pathological phenomena of their sickness were highly developed, the abstraction of blood operated extremely favorably. The phenomena were, pallor of skin and mucous membranes, headache, tiresomeness, noise in the ears, proneness to faint, poor appetite, sleeplessness, constipation, extreme irritability, etc., in some cases there were cedema of the lower extremities, diminution of bodily weight; and in all cases a diminution of hemoglobine in the blood. But all these vanished, usually as if by a charm, under the influence of blood abstraction. Sleep, appetite, cheerful disposition returned rapidly; the cedema, the headache, and the constipation passed off, and the patients appeared as if regenerated. Strikingly noticeable among the phenomena of improvement were specially the rapid increase of the strength of the pulse, the increase of blood coloring material, and lastly the increase of bodily weight. In fourteen out of fifteen cases, whose weights were observed, the increase was from one and a half to seventeen pounds! In five cases, however, the increase soon changed into a falling off, yet without a deterioration of the general appearance of the patients. Decidedly no improvement was observed in one hysterical case. In the case of the author's brother, who suffered from obstinate headache, the result or two blood-lettings was a splendid one. Ten other cases of spanemia treated by this method, were crowned with success.

Dr. Wilhelmi draws the following conclusions:

1. Many cases of chlorotic asthenia are met with, in

whom the various preparations of iron produce no effects, and are useless. 2. For a considerable part of such cases, we have a rapid and certain therapeutic remedy in venesection. 3. The favorable action of blood abstraction takes place almost suddenly in the majority of cases, while in a minority the improvement is more gradual, and in such cases it may become necessary to repeat the operation. 4. In those cases, too, of chlorotic asthenia, where iron was not administered at all, and where the general system is greatly deranged, and the percentage of hemoglobine in the blood had fallen considerably, in such cases venesection is indicated. 5. Of the frequency of relapse under this treatment it is not right yet to speak, seeing that it was practiced one year only, and in few cases. But thus far the therapeutic action of venesection appears to be permanent. 6. In hysterical and symptomatic spanemia, the action of blood-letting is either transient, or zero. 7. The opening of the vein must always be done in the supine position of the patient, and the perspiration must be assisted by warm drinks and covering. 8. The quantity of blood sufficient to abstract at one time is from eighty to one hundred grammes (211/3 to 263/3 drachms). 9. It may be best, on the whole, to abstract blood in females near the time of menstruation; in cases of habitually severe hemorrhage to do it two to three days before, and in those of paucity of flow, two days after menstruation. 10. When the operation has to be repeated, it should not be done except after an interval of four to eight weeks. 11. Similar to its favorable action in chlorotic asthenia, venesection shows itself efficient also in some forms of headache.

Time will show, whether the conclusions of this evidently honest physician are true or not. But he is right in putting as a motto to his published work, the words of a German medical critic (Goldsmidt), who says: "The time is past, when the *improbable* is to be branded as the *impossible*, and when that which contradicts our traditional conceptions is to be decried as swindling."—S. Groozdev, in *Vratch*, No. 6, 1890.

## FRENCH NOTES.

By A. E. Roussel, M.D.

THE REMOVAL OF TATTOOING.—M. Matignon exhibited a patient with whom he had tried the method of M. Variot, which consists in retattooing the existing imprints with tannin.

He had made use of a very concentrated solution, and an instrument composed of a sufficiently large piece of wood, armed with seven fine needles, placed side by side, and about half a millimeter apart.

The operation is painful. It was necessary, at first, to make use of hypodermic injections of cocaine, which produced complete anesthesia of the parts.

M. Matignon remarks that blood should issue from each puncture, in order to obtain a successful result. We are in this way assured of the sufficient penetration of the needles.

The operation has been performed on this patient one week. We notice on the parts in question small eschars, underneath which we find the derma, with its papillæ, and the disparition of the old blue tint. From eighteen to twenty days are necessary to obtain the total disparition of these marks.

-Journal de Médecine de Bordeaux.

Perihepatic Frottements in Abscess of the Liver (M. Bertrand, Brest).—The perihepatic frottement is perceived by the ear and by the finger in the right hypochondrium, on a level with the anterior axillary line, principally near the seventh intercostal space. It may be that the pleura sometimes participates in the genesis of this bruit, but it is especially noticed on a level with the peritoneum. The circumscribed inflammation and adherence of the peritoneum is the principal reason of this frottement. This sound may confirm a hesitating diagnosis; it precedes by several days cedema of the parts. Its maximum corresponds to the maximum of pain; it is here that the puncture should be made.

-Bulletin de l'Académie de Medecine.

TREPANNING OF A CERVICAL VERTEBRA. - M. Dèces reports the above operation performed on a woman of thirty-six years, of good constitution, who, during the month of June last, received a bundle of hav on the head. As a consequence of this traumatism. she had marked flexion of the neck on the thorax, paresis of arms and of legs. Four to five months afterwards, it was noticed at the clinic that the sensibility was everywhere intact, but that there was a notable diminution of the motility (dynamométrie); there was also observed a marked protuberance on a level with the sixth cervical vertebra. Slight motility of the laminæ makes us take into consideration the probability of either a fracture or a semi-luxation. Compression of the cord was diagnosed by the displacement of the laminæ, or at least a hemorrhage of the parts, and trepanation of the left lamina of the sixth cervical vertebra was decided upon; this was performed; antiseptic dressing.

This operation was followed the next day by a notable amelioration of the morbid phenomena of the right side. This amelioration increased from day to day, and the left side was also equally benefited. We had to deal, therefore, with a case of compression of the central nervous substance.

-L' Année Médicale.

Note on the Comparative Results of Revaccinations on the Arm and on the Leg (Stackler). — Having had occasion, in April, 1888, to vaccinate a number of school children on the arm and leg, M. Stackler was struck by the results obtained in favor of the last-named member. But, as the total number of cases was comparatively small, he resumed, in June, 1889, his comparative operations, with the following results:

Revaccination.	Patients.	Positive Results.	No. of Pus- tules in Posi- tive Results.	False or Doubtful Re- sults.	No. of Pus- tules in the Doubtful Re- sults.	No Results.	
Left leg	99.	23.	49.	31.	87.	45. 42. 45.45 53.84	
Left arm	78.	II.	32.	25.	41.	42.	
Left leg \	99. 78. For {	23. 11. 23.2	32. 12.37 10.25	31. 25. 31.3	41. 21.99 13.14	45-45	
Left arm	foor	14.1	10.25	32.0	13.14	53,84	

-Archives de Médecine et de Pharmacie.

mixed with an equal bulk of mucilage of gum arabic and with the addition of a few drops of glycerin. This should be painted all over the bruised surface with a camel's-hair pencil and allowed to dry on. A second or third coating being applied as soon as the first is dry. If done as soon as the injury is inflicted, this treatment will invariably prevent the blackening of the bruised tissue. The same remedy has no equal in rheumatic sore or stiff neck.

—New York Med. Times.

BLACK EYR.—There is nothing to compare with

the tincture or a strong infusion of capsicum annuum

FRACTURE OF THE PATELLA TREATED WITHOUT OPERATION.—William T. Bull (N. Y. Med. Record) reports the results of twenty-two cases of fracture of the patella treated without operative interference.

He says, My method consists in the use of plasterof-paris bandages after the effusion has subsided, with the application beneath the splint of adhesive plaster strip to steady the fragments. If the patient has been seen immediately after the accident, ice-bags or cold water compresses have been applied to the knee, after a posterior splint of wood, felt, or pasteboard (and in hospital always of tin or iron, the Volkmann's splint with footboard) has been fitted to the limb. If seen several hours after injury, I have discarded the use of cold or evaporating lotions, especially the lead and opium wash, which is ruinous to linen, and relied on equable compression of the joint, with cotton compresses and snug bandages, to promote absorption of the effusion; the limb has been slightly elevated on The diminution in swelling has permitted the approximation of fragments after periods varying from two days to two weeks; on the average, I should call it the fourth or fifth day. When the gypsum bandage is applied, the limb has been elevated, and the upper fragment has been drawn down and held by the loop of plaster, the center of which rests above it on a pad of lint or gauze, while the ends pass obliquely downward to the upper part of the calf and the posterior surface of the leg. The lower fragment is similarly supported. It is possible to tilt the fragments by this manœuvre, and so separate their upper margins. Their position should be noted, and the first turns of the muslin or flannel bandage, which protects the skin from the gypsum, should be passed circularly about the center of the knee, to counteract this tendency to tilt.

After the gypsum splint is dry, the patient sits up, and, if the splint should grow loose through shrinkage of the limb, another splint may be put on. At the end of six or eight weeks this splint is removed, a hard one of leather applied posteriorly, and the patient allowed to walk. For the next month, or six weeks, the posterior splint is worn by day only, and the limb vigorously kneaded. The patient is advised to use a cane for several months longer, principally as a reminder not to call too heavily upon the affected limb. Firm union can generally be obtained along with complete motion, and this, too, without any delicate or risky surgical performance requiring a skilled operator.

SALICYLIC ACID IN DIPHTHERIA.—A. W. Nelson, M.D. (Jour. Am. Med. Asso.), advocates the topical treatment of diphtheria with pure salicylic acid.

HASKINS (Med. Brief) suggests that in treating children with prolapsus ani, they should, in all cases, empty the bowels while lying in bed, on the back, with the feet raised six inches higher than the body.

LANOLIN AS AN OINTMENT BASE.—H. Helbing, in view of the viscidity of lanolin, suggests the following compound as better suited as an ointment base than lanolin by itself:

 R.—Anhydrous lanolin
 65 parts.

 Liquid paraffin
 30 "

 Ceresin
 5 "

Melt together and incorporate 30 parts of water by heating.

—Pharmaceutical Journal.

#### BORDET'S Hair Tonic consists of the following:

R.-Carbolic acid,

Tincture of cantharides, each .... 30 minims.

Tincture of nux vomica ...... f3ij.

Compound tincture of cinchona ... f 3j.

Cologne water ..... f 3j.

Cocoanut oil, enough to make ... f 3iv.

This is to be applied to the scalp twice daily with a small sponge.

-American Druggist.

Kraurosis Vulvæ.—A. H. Ohmann-Dumesil, M.D. (New Orleans Medical and Surgical Journal), mentions thirty-five cases of this trouble, three of them having come under his own observation. Kraurosis vulvæ consists in an "essential atrophy of the integument of the female genitalia, accompanied or not by various objective and subjective symptoms." But few cases, says the author, have thus far been reported; but that, he thinks, is mainly because enough attention has not been paid to the disease.

PROF. W. W. KEEN recommends the following as a pleasant and nutritious food, suitable for the most delicate stomach. In fact, it will be difficult to induce the stomach to retain any food if this be rejected:

The whites of two eggs are put in a bottle with two ounces of lime water, and shaken well, for at least five minutes. Half a pint of milk is then added, and the shaking repeated when, finally, sugar, sherry, and nutmeg are added, to suit the

DR. CLAUSI, of Paris (Jour. Am. Med. Asso.), succeeded in relieving two cases of intestinal occlusion by enemata of sulphuric ether, after all the ordinary means had been tried in vain.

Ten grains of ether were dissolved in alcohol, and three hundred grams of fennel water added. By means of a long elastic tube, the whole was injected as high up as possible. The patient at once experienced a painful sensation of heat over the abdomen, but in a short time copious evacuations of fecal matter took place, accompanied by a disappearance of the colicky pains, and all the other morbid sensations.

Danger in Canned Foods.—On account of the articles that will probably soon begin to appear in the newspapers, with regard to the dangers lurking in canned foods, we condense from *The Doctor* a few facts. According to Prof. Attfield, of London, there is never, in canned foods, enough of a soluble compound of tin to exert any appreciative effect. One ounce of the metal in filings or fragments is occasionally prescribed for worms, without ill effect on the host, and often without any on the worms. He thinks that one ounce might possibly be found in four hundred-weight of food.

If there is any harm in the food, it probably arises from some degenerative change in the food itself, not from the can.

MORBID PERFORATIONS OF THE NASAL SEPTUM.

—A. B. Thrasher, M.D. (Jour. Am. Med. Asso.), reports several cases of perforation of the nasal septum from causes other than syphilis. His local treatment consisted in cleansing the surface, cauterizing the ulcer with a 25 per cent. solution of argentum nitras or other caustic, the application of some mild disinfectant, such as Seely's yellow oxide of mercury ointment. If necrosed bone was present, it was, of course, removed, and the supposed underlying dyscrasia treated. With regard to many cases happening in his private practice, he formulated the following conclusions:

1. A large majority of these cases of perforation of the septum were non-syphilitic.

2. The majority of the cases were giving rise to no trouble, and needed but simple, local treatment.

3. The prognosis in every case was favorable with treatment; in the majority of cases, favorable without treatment.

HYDROPHOBIA.—A case is reported by E. A. Robin, M.D., in the New Orleans Medical and Surgical Journal. A colored boy, aged ten years, who had been bitten by a dog, in four weeks began to complain of pain in the cicatrix on the leg, and along the great sciatic nerve. Next followed spasms of the pharynx; and in spite of large doses of chloral hydrate and potassium bromide, all the classical symptoms presented themselves and the patient died in frightful convulsions, in slightly over twenty-four hours after first having been brought to the hospital. Portions of the medulla were emulsified with distilled water and injected into the eyes of two pups, and under the dura mater of a dog. In ten days the dog began to show symptoms of rabies, first, becoming despondent, melancholy, then excited, and killing the pups with which he had before been friendly. Spasms of the pharynx on attempting to eat were noted, and rigors of the whole body. On the twelfth day he died.

THE Hospital for Children, San Francisco, Cal., during 1889 treated 807 out-door cases, for whom 4,343 prescriptions were compounded. The receipts amounted to \$33,477.06, and disbursements to \$31,568.87, including \$12,875.50 to the Building Fund. In the wards, 309 cases were treated, with 11 deaths; 79 operations were performed, 14 of which are classed as capital; 15 births occurred. Virginia W. Smiley is Resident Physician.

# Medical News and Miscellany

HAYTI has not enough doctors.

TYPHOID fever is epidemic in La Paz, Bolivia.

CASES of "nona" are reported in Hessen Cassel.

YELLOW fever has appeared all along the Brazilian coast.

Dr. Gorton has been elected Mayor of Corning, N. Y.

KNORR has received over a million from royalties on antipyrin.

THE body of Dr. W. S. Schell was cremated at Germantown.

THE American Medical Association meets at Nashville, May 20.

THE American Neurological Society meets June 4, in Philadelphia.

THE Nebraska State Medical Society meets at Beatrice, May 13.

Dr. D. HAYES AGNEW has been seriously ill, but is now recovering.

THE Missouri Valley Medical Society met at St. Joseph, Mo., March 20.

THE Indiana Medical College has come up to three terms of six months each.

JEFFERSON COLLEGE graduated a class numbering two hundred and twenty.

A TRAINING School for Nurses has been opened at St. Luke's Hospital, St. Louis.

THE Italian Maritime Hospital opened March 16, at 141 Harrison St., Brooklyn, N. Y.

A DEAF-MUTE in Memphis has invented an electric telephone which enables him to hear.

DR. WILLARD PARKER is said to have received a fee of \$100,000 for the removal of a nævus.

CAMDEN has raised her liquor license fee to \$500, and requires the liquor to be drank on the premises.

DR. WM. SALMON, of England, is said to be the oldest Freemason in the world; his years being over 100.

THE Resident Staff of the Philadelphia Hospital gave a reception to their new chief, Dr. D. E. Hughes.

At the Franklin Institute to-night, Prof. Cope and Dr. Bonwill discuss the "Evolution of Mammalian Dentition.

Dr. A. C. W. BEECHER has resigned the office of Assistant Secretary to the Philadelphia County Medical Society.

A REGIMENT of pioneers, at Presburg, Hungary, has been attacked by epidemic trachoma; only forty, out of five hundred and seventy, escaping. Many have become blind.

THE burden of our prayer is now that we may be spared the sight of any more lectures or articles on the "Grip."

VERY few of the graduates of two-term schools succeed in passing the examinations of the Pennsylvania faculties.

FIRST-CLASS race-tracks are said to employ physicians, who remain in attendance during theraces, to give help if needed.

THE class of '88 (Jefferson) held their annual reunion and banquet at the Colonnade Hotel. Dr. G. M. Gould presided.

COMMODORE VANDERBILT left his physician \$20,-000; and his example ought to be followed much more frequently than it is.

THE overcrowded condition of the Philadelphia Hospital is exciting some attention. New wards are needed in the Insane Department.

MOUNT MEIGS, Ala., has a girl who blooms in summer and hibernates in winter. In the spring she subsists on the buds of plants.—Times.

THE Medical College of South Carolina has adopted the three years' course. A professor of Pathology and Practice will be elected on April 15.

DR. C. P. WAGAR, of the Toledo Medical and Surgical Reporter, has been made happy by the unexpected advent of twins in his household.

Dr. H. A. Brooks has been appointed Superintendent of the Elgin Insane Asylum, to fill the vacancy caused by Dr. Kilbourne's death.

J. S. MORGAN, of London, has given \$100,000, and J. P. Morgan, of New York, \$50,000, for a free public library and art gallery, at Hartford, Conn.

THE Home for Aged and Infirm Methodists will be opened at 531 York St., the property being the gift of W. T. Bailey. Mrs. Bailey is the Manager.

DR. H. A. HARE has been appointed Clinical Professor of Diseases of Children, at the University of Pennsylvania; and Dr. C. Goodell, Instructor in Gynecology.

A NEW plague, known as nouna, has appeared in Europe. The attack is marked by stupor, lasting one or two days, perhaps preceded by a few days' malaise. Some die; others do not.

DR. ELIZABETH MALLISON, a graduate of the Woman's Medical College, of Philadelphia, has been appointed Assistant Physician to the St. Peter's Insane Hospital, Minnesota.

A NEW method of punishing non-union tailors is said to have been utilized in New York, where a man was found to have had twenty-seven inches of round leather belting forced into his bladder.

Some newspaper excitement has been manifested over the discovery of a Chinese leper in the Philadelphia Hospital, where he had been sent after being picked up on the street. He is now at the Municipal Hospital.

DR. FRED'K S. DENNIS, of New York, will, by invitation, address the Philadelphia County Medical Society on April 9, upon Compound Fractures. The paper is based upon an experience in over 1,000 cases.

A WRITER in the N. Y. Saturday Review, says that there is more warmth in a handsome diamond ring than in the thickest glove. At any rate, he saw nothing but a diamond ring on a young lady's hand one cold day, when everybody else was muffled in furs.

THE Medico-Chirurgical College will graduate a class of twenty-five on April 10. The commencement will be held at the Chestnut Street Opera House, at noon. Prof. Laplace will give the Alumni Oration, and Prof. Shoemaker the Valedictory Address.

THE Hahnemann College graduated sixty four on Wednesday. The address was given by Dr. John E. James, and was devoted mainly to the abuse of the regular medical profession, the Medical Examiner's bill, and the newspapers which favored that measure.

THE New York Legislature has passed a bill by which the pauper insane will hereafter be provided for by the State, instead of by the counties, except in New York, Kings, and Monroe counties. This transfers these unfortunates from the county poor-houses to hospitals for the insane.

ALL our early training was to the effect that to be a skeptic is very, very wicked; yet, when a man, even though he be a homoeopathist in good and regular standing, records, in the *Medical Visitor*, a typhoid fever patient with a temperature of 115° F., we falter in our trustful faith.

DURING 1889, New Yo.k reported 37,527 births, and 39,583 deaths. The Summer Medical Corps visited 264,520 families, and prescribed for 16,248 persons (?). There were 1,414 cases of typhoid, with 357 deaths; 8,849 of scarlatina, with 1,163 deaths, and 6,489 of diphtheria, with 1,734 deaths.

It is well-known that graduates of a Homoeopathic college are not eligible to appointments in the United States army or navy, though The Hahnemanian says that a charge of this kind is always met by an assertion from the authorities that no homoeopathist has ever been refused, etc. The journal calls on some of the young men to make the adventure, to see what happens, and, if they are refused, let them report the indignity at the next meeting of the American Institute

THE Santa Fé Railway Employés' Association has fitted up a series of hospitals, for the care and treatment of sick and injured employés. These are located at the following points: Fort Maclison, Iowa, Wm. Barry, surgeon; La Junta, Colorado, Frank Finney, surgeon; Las Vegas, New Mexico, F. M. Farrar, surgeon; Ottawa, Kansas, G. W. Nash, surgeon.

Nearly 18,000 cases have been cared for by the Association. Dr. J. J. Ransome is Chief Surgeon, with a corps of Assistant Managers for the divisions.

In the report of proceedings of the New York Academy of Medicine, in the TIMES AND REGISTER of March 22, Dr. Coe's name was inadvertently dropped, and his remarks thereby attributed to Dr. Goelet. Dr. Coe's name should have appeared on page 276, at the beginning of the seventeenth line from the bottom of the first column.

## NEW GRADUATES:

Kansas City Medical College	Graduates,	16
Bellevue Hospital Medical College, N. Y.		144
Missouri Medical College	- "	IOI
St. Louis Medical College	**	22
Homœopathic Medical College, of Mo.	"	25
New Jersey Med. and Surg. College (?	) "	. 3
Albany Medical College	**	37
University of Buffalo		53
University of City of New York	**	160
Jefferson Medical College, Philadelphia	a "	220

The following may illustrate the tendencies of hospital attendants when left too much to their own devices, and also the value of ladies in the management. The matron of an institution for orphans received a supply of goods to be made into garments for her wards. Concluding, however, that there was no special need for such articles, she had the goods made up into clothes for her own daughter. The lady managers finding this out, at once discharged the matron. This lady is well-known to the writer as a kind-hearted woman, who never spared herself in attending to her duties; and yet the tendency to "hospitalism" led to this misappropriation.

The Medical Aid Society for Self-supporting Women is located at 1225 Chestnut St. It is in charge of several young female physicians, and is open from 6 to 7.30 P. M. There are four beds, with a resident nurse. A small fee is charged; the receipts being devoted to the development of the charity. It is intended for the large class of young women whose wages are not sufficient to support them and pay ordinary physicians' fees. Drs. Werner, Formad, Luther and Hatchette, form the attending staff. We are by no means satisfied that this is a useful or needed charity; believing that the profession supplies this class with attendance without asking fees beyond the ability to pay.

THE investigation at the Blind Asylum has resulted as we predicted at the start. Some abuses were unearthed, enough to justify the investigation. The result will undoubtedly be a large increase in the personal attention given by the Managers, and in the material comfort and care of the inmates, with less stress upon the importance of routine and parsimonious economy; better food, kinder treatment, more solicitude for their welfare. But it is evident that the greater part of the evidence given was sheer nonsense. One boy complained that he had been spanked, and it is quite likely he needed it. Those who have had experience in the care of persons deprived of one or more special senses will acknowledge that such persons are very hard to deal with, much more trying and less reasonable than children who are normal. It is easy to criticize, but if we could put ourselves in the place of the persons censured, we would find the task of improving upon them somewhat more difficult.

Fox indulged in long and bitter invective against Pitt; but he had not long succeeded to the great Earl of Chatham, when he was compelled, by the force of circumstances, to pursue the same policy.

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MUCH annoyance is expressed by physicians over the use of their names as endorsers of preparations for the sick. In some cases, names are thus published in direct defiance of the prohibition of their owners. In other cases, the articles tested were of good quality, but those furnished the public are not of the same standard.

DURING the week ending March 29, there were reported the following deaths in Philadelphia:

Phthisis														62
Pneumoni	a.													47
Heart dise	ase													28
Convulsion	ns.													20
														18
Old age. Inflammat	tion	0	fs	to	ma	icl	1 8	n	d	bo	We	ls		16
Cancer							,							15
Bronchitis														15
Apoplexy														13
Bronchitis Apoplexy Inflamma	tion	0	f 1	bra	air	1								. 13
Marasmus						_								13
Typhoid for Bright's d Paralysis Inanition	eve	-				1								12
Bright's.d	isea	se				•		•	•	•				TI
Paralysis			•			i		•	•	•			•	11
Inanition	• •	•	•	•	•	•		9			1	·		TO
Total Respirator Circulator	al, a	11	ca	us	es									438
Respirator	ry													146
Circulator	y .									٠.				60
Geniio-uri	nar	v												20
Nervous		٠.						. 1						51
Digestive														
Digestive Constituti	ona	1												54
Microbic	900													162

THE sixty-fifth annual commencement of Jefferson Medical College was held on April 2, at the Academy of Music. The faculty and the graduates appeared for the first time in cap and gown. A portrait of the late Prof. S. W. Gross was presented by the class The opening prayer was given by Rev. Dr. H. C. McCook. Prizes were awarded as follows: Medical News prize of \$100, for the best thesis, to E. Solorzano, of Nicaragua; gold medal for best thesis on practice, to G. D. Thomas, of Pennsylvania, with honorable mention of W. R. Irons, of Pennsylvania; gold medal for best obstetrical thesis, to C. D. Spivak, of Russia, with honorable mention of J. D. Espinosa, of Nicaragua; case of instruments, for the best thesis on materia medica, to R. W. Fisher, of Delaware; a case of instuments for the best thesis on surgery, to C. W. Davis, of Pennsylvania; a gold medal for the best report of Dr. T. G. Morton's clinic, to G. F. Roehrig, of Pennsylvania; with honorable mention of C. Ritter, of North

The valedictory oration was given by Prof. H. C. Chapman. The graduates numbered 220; of whom Pennsylvania contributed 111; New Jersey, 16; Ohio, 11; Virginia, 6; Delaware, 5; Kentucky, 5; Tennesee, 5; New York, 4; Maryland, 4; California, 4; Texas, 4; Missouri, 4; North Carolina, Georgia, Massachusetts, 3 each; Nebraska, Illinois, West Virginia, Mississippi, Alabama, Kansas, Brazil, Nicaragua, Russia, 2 each; Rhode Island, Wisconsin, Iowa, Minnesota, Connecticut, Montana, Arizona, Utah, New Brunswick, France, Scotland, Germany, Mexico, China, 1 each.

LOYAL, but also patriotic, Scotch and Irish doctors are squabbling over the words "English" and "British," and ask for a word which may be used to designate an inhabitant of the United Kingdom, including Ireland. As the British Isles include the whole group, there is little objection to the word "British," except that it is usually employed as pertaining to Great Britain alone. This suggests the question: By what name are we to be known abroad, to distinguish us from the citizens of Canada or Mexico? Either such a title should be coined, or those portions of America should be annexed at once, that the name of "American" may have a definite meaning.

#### To Contributors and Correspondents.

ALL articles to be published under the head of original matter must be contributed to this journal alone, to insure their acceptance; each article must be accompanied by a note stating the conditions under which the author desires its insertion, and whether he wishes any reprints of the same.

Letters and communications, whether intended for publication or not, must contain the writer's name and address, not necessarily for publication, however. Letters asking for information will be answered privately or through the columns of the journal, according to their nature and the wish of the writers.

The secretaries of the various medical societies will confer a favor by sending us the dates of meetings, orders of exercises, and other matters of special interest connected therewith. Notifications, news, clippings, and marked newspaper items, relating to medical matters, personal, scientific, or public, will be thankfully received and published as space allows. Address all communications to 1725 Arch Street.

# Army, Navy & Marine Hospital Service.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, U. S. Army, from March 25, 1890, to March 31, 1890.

Leave of absence for one month, based on surgeon's certificate of disability, with permission to apply for an extension of one month, is granted Captain M. E. Taylor, Assistant-Surgeon. Par. 3, S. O. 26, Dept. of the Columbia, March 18, 1800.

By direction of the Secretary of War, Captain Henry P. Birmingham, Assistant-Surgeon, is relieved from station at Fort Klamath, Oregon, and from temporary duty at Vanconver Barracks, Washington, and will report in person to the commanding officer, Boise Barracks, Idaho, for duty at that post. Par. 6, S. O. 72, A. G. O., Washington, D. C., March 27, 1890.

"Changes in the Medical Corps of the U. S. Navy for the week ending March 29, 1890.

AMES, H. E., Passed Assistant-Surgeon. Ordered to Museum of Hygiene, Washington, D.C.

Official List of Changes of Stations and Duties of Medical Officers of the U.S. Marine Hospital Service from March 3, 1890, to March 24, 1890.

Long, W. H., Surgeon. Leave of absence extended five days. March 11, 1890.

DEVAN, S. C., Passed Assistant-Surgeon. To proceed to Erie, Pa., as Inspector. March 12, 1890.

HRATH, F. C., Assistant-Surgeon. To proceed to Cleveland, Ohio, for temporary duty. March 18, 1890.

STIMPSON, W. G., Assistant-Surgeon. Commissioned As sistant-Surgeon, March 11, 1890. Assigned to temporary duty at New York, N. Y. March 13, 1890.

# Medical Index.

A weekly list of the more important and practical articles appearing in the contemporary foreign and domestic medical

Anatomie des Nasenrachenraumes, Poelchen. Virchow's Arch. Ætiologie der Cholera Asiatica, zur, Hueppe. Berl. Klin. Woch.

Algosis faucium lepthothricia, Mettenheimer. D. Med.-Ztg. Altérations chimiques du suc gastrique et de leur traitement, Cheron, Bulletin Gén. de Thér., 28 Fév., 1890.

Appendicitis, laparotomy, recovery, Sheperd. Mont. Med. Jour. Abdominal section in tubercle of the peritoneum, Gardner. 16. Ataxia in a child twelve years of age, Blackader. *Ibid*. Asthenopie lacrymale, Trousseau. Rec. d'Opht. Asepsie pour la cataracte, Rolland. *Ibid*.

Asepsie pour la cataracte, Rolland. 19td.
Abdominal distention of typhoid fever, Maclagan. Lancet.
Acute ascending paralysis, followed by ataxic paraplegia,
Brown. Med. Rec., March 22, 1890.
Acute dacryocystitis, Webster. N.Y. Med. Jour., March 22, '90.
Acute lobar pneumonia, Townsend. Bost. Med. and Surg. Jour.
Action de la caféine sur les fonctions inotrices et respiratoires à l'état normal et à l'état d'inanition, Sée. Bulletin de

l'Acad. de Méd., 11 Mars, 1890. Blepharitis, management of, Gradle. West. Med. Rep., March. Bacteriology in relation to medicine, Billings. *Ibid.*Bilateral orbital gummata, Evans. Amer. Pract. and News.
Bladder tumor, electrical illumination, Gardner. Australian

Med. Jour., Jan. 15, 1890.
Behandlung warziger Gebilde mittelst der Elektrolyse, über die, Ehrmann. Wiener Med. Presse, 2 März, 1890.
Blutentziehung, über, Sacharjin. Int. Klin. Rund., 2 März, '90. Bubo, a lecture, Lydston. Virg. Med. Monthly, March, 1890. Calculs biliaires, traitement de. La Med. Mod., Janvier, 1890. Complication de influenza, Cheminade. Jour. Med., Mars, '90. Cæsarean section, Cameron. Brit. Med. Jour., March 15, 1890. Cæsarean section, McGowan. *Ibid.* 

Cardiac insufficiency in its relation to abortion, Jones. Chorea in adult among insane, Diller. Amer. Jour. Med. Sci. Cancer of the uterus, Reed. Cin. Med. Jour., March, 1890. Changes in the teeth, due to constitutional causes, Rousseau.

Ala. Med. and Surg. Age, March, 1890.
Carcinoma of the breast, Dowling. *Ibid*.
Cystic tumors of the broad ligament, Stanton. Cin. Lan.-Clin.
Cataract Extractions, one hundred, Swanzy. Brit. Med. Jour.
Color blindness, Bickerton. *Ibid*.

Cardiograms from the human heart, MacDonnell. The Pract. Causes determining pulmonary emphysema, Edkins. *Ibid.* Clinical observations, Seiler. Jour. Amer. Med. Ass'n. Congenital malposition of the uterus, producing sterility.

Med. Press and Circular, March 5, 1890. Chronic nasal catarrh, Douglas. N. Y. Med. Jour., March, '90,

Chronic nasal catarri, Douglas. N. Y. Med. Jour., March, '90.
Compound fracture of skull, Lockwood. *Ibid.*Curettage uterin, Bouilly. Gaz. de Gyne., 15 Mars, 1890.
Case of Cardiac disease, Minot. Boston Med. and Surg. Jour.
Ciclo biologico dell' ematozoo falciforme, Antolisei. La Rif.
Med., 6 Marzo, 1890.
Chorea and tremor, Mills. Jour. Nerv. and Mental Disease.

Congenital bilateral pleuroplegia and facial paralysis. Shapringer. Ibid.

Circulation, die, im Gehirn und Virchow's Archiv, 2 Januar, 1890. im Gehirn und ihre Störungen, Geigel.

Chloralamid als Hypnoticum, Rosenthal. Med. Monatsschrift. Clinica psichiatrica della R. Università di Siena. La Rif. Med. Diagnosis of pregnancy, by the changes of the urinary phosphates, Budd. Virg. Med. Monthly, March, 1890.

Del riflesso rotuleo e del dono del piede nel parossisma febbrile da infezione malarica, Cristiani. La Rif. Med., 19 Feb.

Del rapporto tra l'alta tensione del polso e l'albuminuria. *Ib.* Des pierres oculistiques, Auzilhon. Rec. d'Opht. Des pierres oculistiques, Auzilhon. Rec. d'Opht.
Des troubles oculaires dans l'influenza, Galezowski. *Ibid.*Despegamiento epifisiario, Bueno. Cronica, Marzo de 1890.
Diphtheria, Longhead. Cin. Med. News, Feb., 1890.
Deviation of nasal septum, Brown. West. Med. Rep., March.
Duct cancer, Barker. British Med. Jour., March 15, 1890.
Die Influenza-Epidemie, Bratanich. Prager Med. Wochensch. Die Innuenza-Epidemie, Bratanich. Prager Med. Wochensch. Diphtheria, topical treatment, Nelson. Jour. Amer. Med. Ass'n. Drainage in abdominal surgery, Penrose. *Ibid.*, Feb., 1890. De la diphthérie, Tisné. La France Méd., 14 Mars, 1890. Diet of childhood, Waugh. Diet. Gaz., March, 1890. Diseases of Southern California, Bullard. S. Cal. Pract., March. Della influenza, Semmola. La Rif. Med., 5 Marzo, 1890. Erfolgreiche Behandlung des Unvermögens zu stillen, Mensinge Memorabilien.

singa. Memorabilien, 5 März, 1890.

Erkrankungen der Harn- und Geschlechtsorgane, Neuhaus. Deutsche Medizinal-Zeitung, 6 März, 1890. Deutsche Medizinal-Zeitung, 6 März, 1890.

Epilepsy, Ingram. Jour. Nerv. and Mental Disease.

Elektrolyse, Ehrmann. Wiener Med. Presse.

Epilepsy, chorea, Segnin. Can. Pract., March 17, 1890.

Etiology of phthisis, Welch. The Practitioner, March, 1890.

Ectopic gestation, Galvanism, Taylor. Jour. Amer. Med. Ass'n.

Electricity in chronic pelvic diseases, Baldy. Med. News.

Eine neue Methode der Gastrostomie, Hahp. Centralbl. f. Chir.

Extrophia de la vessie, Segond. Le Bull. Méd., 19 Mars, 1890.

Fibro-sarcoma of left clavicle, Barling. Br. Med. Jour., March.

Forms of nephritis, French. Cin. Lancet-Clinic, March, 22.

Fracture and dislocation of elbow, Brokaw. St. Louis Cour. Med.

Fracture of patella, Bull. Med. Rec., March 22, 1890.

Grippe et pneumonia, Jaggard. Le Bull. Méd., 2 Mars, 1890.

Heart-beat and pulse wave, Roy and Adami. Pract'r, March.

Hypnotism at home and abroad, Myers. Ibid.

Hamorrhagischer Diathese nach Influenza, Pick. Prager

Hypnotism at home and abroad, Myers. 1012.

Hamorrhagischer Diathese nach Influenza, Pick. Prager Med. Wochenschrift, 12 März, 1890.

Hemiplegia, Bastian. The Lancet, March 8, 1890.

Habituelle obstipation, Nothnagel. Wiener Med. Presse.

Habituelle obstipation, Nothnagel. Wiener Med. Presse. Iodols in der syphilidologischen Praxis, Szadek. *Ibid.*Injuries of bladder during laparotomy, Jackson. Jour. Amer. Med. Ass'n, Feb. 22, 1890.
Immediate reduction of deformity after tenotomy, Smith. *Ib.*Influenza, Pribram. Prager Med. Woch., 5 März, 1890.
Idroematocele, d'Ambrosio. La Rif. Med., 24 Feb., 1890.
In causa di parricidio, Funaioli. *Ibid.*Influenza, Mac-Cormac. Med. Press and Cir., March 5, 1890.
Inguinal colotomy, Rose. *Ibid.*Inhalation treatment resp. diseases, Bauer. N. Y. Med. Jour.
Infant mortality, cause and prevention of, Beard. Diet. Gaz. Kasuistiske Meddelelser fra Ribe Amtssygehus i Va de, Larsen.
Hospitals-Tidende.

Hospitals-Tidende.

Leprosy with report of a case, Hoffman. Maryland Med. Jour. Les sanatoria pour tuberculeux, Dandois. Rev. Méd. de Louv. La grippe, Gellie. Jour. de Méd., Mars, 1890.

Leprosy, early stages of, Hutchinson. Br. Med. Jour., March. Lesions on the throat in leprosy, Hillis. Dubl. Jour. Med. Sc. Medical selection of lives for regurance on the Foot. Mid.

Medical selection of lives for assurance, on the, Foot. *Ibid.*Microbes de l'osteomyelite aiguë dite infectieuse. Bull. Méd. Maladie de Friedrich. Ibid.

Malarial neuritis and neuroretinitis, MacNamara. Br. Med. Jour. Mitral stenosis complicat. pregnancy and labor, Edge. Lancet. Neuester Nadelhalter für platte Nadeln, Hagedorn. Centralbl. Neuritis multiplex, Kahler. Wiener Med. Presse.

New remedies, Partridge, Lanp. Kan. City Med. Ind., March. Ophtalmie hysterique, Simi. Rec. d'Opht.

Obstructed retinal circulation, Morton. Ophth. Rev., March. Obstruction intestinale, Bouveret. Bull. Med., 12 Mars, 1890. Pernicious vomiting of pregnancy, Durham. N. C. Med. Jour. Puerperal eclampsia, a study of, Graham, Virg. Med. Monthly. Pelvic abscess, Smith. Med. Press.

Pelvic abscess, Smith. Med. Press.
Pulso lento, intermitente y patologico, Lee. Cronica, Marzo. Pleurisy, Prevost. Can. Pract., March 17, 1890.
Phthisis, etiology and prevention of, Ransome. Brit. Med. Journal, and The Lancet.
Place of sea voyage in therapeutics, Lindsay. Amer. Journal of the Med. Sciences, April, 1890.
Present pneumonia epidemic, local aspects of, Irwin. Mont. Med. Journal, March, 1890.
Poisoning by carbolic acid, Davies. Lancet, March 8, 1890.
Physician on witness stand, Hammond. St. Louis Cour. Med. Prophylaxis of tuberculosis, Wilson. Jour. Amer. Med. Ass'n. Perforations of nasal septum, Thrasher. Ibid.
Pathological anatomy of Landry's paralysis. Cin. Lancet-Clin. Paroxysmal running in childhood, Bullard. Boston M. S. J. Practical asepsis, Crile. N. Y. Med. Jour., March 22, 1890. Pneumothorax occurring in phthisis, Williams. Ibid.
Pneumonia with peculiar symptoms, Kyger. Lanp. Kansas

Pneumonia with peculiar symptoms, Kyger. Lanp. Kansas City Med. Index, March, 1890. Retention of urine, Browne. *Ibid*. Rein flottant et nephrorrhaphie, Terrillon. Bulletin Méd.

Relations of dentistry to medicine, and aseptic dentistry, Wright. Intern'l Den. Jour., March, 1890.
Railway spine, Bremer. Cin. Med. News, Feb., 1890.
Reflex neuroses, Starr. Med. News, March 22, 1890.
Relations between acne and disease of nasal cavity, Seiler.

Jour. Amer. Med. Ass'n, Feb. 22, 1890. Requirements for preliminary education in medical colleges

of the United States and Canada, Emerson, Ibid.
Rupture of quadriceps extensor, Cutler. N.Y. Med. Journal.
Suprapubic lithotomy in relation to the treatment of encysted calculus, McArdle. Dublin Jour. Med. Sciences, March 1.
Saccharine, Venable. N. C. Med. Jour., March, 1890.